

**Commonwealth of Kentucky  
Environmental and Public Protection Cabinet  
Department for Environmental Protection  
Division for Air Quality  
803 Schenkel Lane  
Frankfort, Kentucky 40601  
(502) 573-3382**

**Proposed**

**AIR QUALITY PERMIT  
Issued under 401 KAR 52:020**

**Permittee Name:** Guardian Automotive Trim, Inc.  
**Mailing Address:** 200 Guardian Avenue,  
Morehead, KY 40351-5006

**Source Name:** Guardian Automotive Trim, Inc.  
**Mailing Address:** Same as above

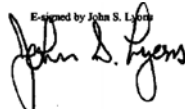
**Source Location:** 200 Guardian Avenue, Morehead, KY

**Permit:** V-05-019 (Revision 1)  
**Agency Interest:** 3866  
**Activity:** APE20070002  
**Review Type:** Title V, Operating  
**Source ID:** 21-205-00042

**Regional Office:** Ashland Regional Office  
1550 Wolohan Drive, Suite 1  
Ashland, KY 41102-8942  
(606) 929-5285

**County:** Rowan

**Application**  
**Complete Date:** 3/31/2008  
**Issuance Date:** 3/7/2006  
**Revision Date:** 1/15/2009  
**Expiration Date:** 3/7/2011

E-signed by John S. Lyons  


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**John S. Lyons, Director  
Division for Air Quality**

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## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first having submitted a complete application and received a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

**01 (01)**                      **Injection Molding Machines** (29) and associated natural gas-fired air makeup unit (0.5 MMBTU/HR)  
Control Equipment: None  
Construction Commenced: December, 1996

### **APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality is applicable to a major stationary source or a major modification which;

- (1) Commenced construction after September 22, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act); and
- (3) Is constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

1.     **Operating Limitations:**  
Good operating practices to minimize the use of VOC-containing materials as appropriate.
2.     **Emission Limitations:** Not applicable.
3.     **Testing Requirements:** Not applicable
4.     **Specific Monitoring Requirements:** Not applicable
5.     **Specific Record Keeping Requirements:** Not applicable
6.     **Specific Reporting Requirements:** Not applicable
7.     **Specific Control Equipment Operating Conditions:** Not applicable

## **SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 02 (S9A) High Gloss Painting System (High Gloss West)** consisting of:
- Dry-Off Oven (1.6 MMBTU/HR)
  - Cooling Exhaust
  - One (1) Primer Booth – 2 robotic applicators with manual touchup
  - Flash-Off Oven (1.2 MMBTU/HR)
  - One (1) Basecoat Booth – 4 robotic applicators with manual touchup
  - One (1) Clearcoat Booth – 4 robotic applicators with manual touchup
  - Cure Oven (6.0 MMBTU/HR)
  - Construction Date: November, 1997
  - VOC Control Equipment: Permanent Total Enclosure (PTE) vented to four (4) Regenerative Thermal Oxidizers (RTO) for control of volatile organic compound (VOC) emissions;
  - PM Control Equipment: Down-draft water wash (spray) system in series with one (1) inch polyester pre-filter followed by main filter, a 24” X 24” X 22” deep eight pocket synthetic bag system.

### **APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality is applicable to a major stationary source or a major modification which;

- (1) Commenced construction after September 22, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act); and
- (3) Is constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

401 KAR 59:010, New process operations, is applicable to each affected facility or source, associated with process operations, which are not subject to another emission standard with respect to particulate matter emissions commenced after July 2, 1975.

40 CFR 63, Subpart PPPP, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Products is applicable within the term of this permit. Refer to GROUP REQUIREMENTS for applicability details.

### **1. Operating Limitations:**

The usage rate of materials used in all affected facilities shall be limited so as to not exceed the emission limitations in Section B.2.

Good operating practices to minimize the use of VOC-containing materials shall be used as appropriate. Additionally, all purging activities shall be performed into a container so as to optimize work practice standards and minimize VOC emissions.

Refer to GROUP REQUIREMENTS for Subpart PPPP operating limitations.

## **SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**2. Emission Limitations:**

**401 KAR 59:010: §3** The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity.

**Compliance Demonstration Method:**

- A) See Monitoring Requirements, B.4
- B) See Periodic Monitoring Requirements table.

**401 KAR 59:010: §3** Particulate emissions shall not equal or exceed 2.34 lb/hr.

**Compliance Demonstration Method:**

The total process weight, "P" as defined in 401 KAR 59:010: § 3, must reflect a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period. This period shall not exceed 24 hours. Continuous compliance shall be assured by adhering to the monitoring and record keeping requirements in the periodic monitoring requirements table.

**401 KAR 51:017**

The permittee shall demonstrate 85% overall control of VOC emissions for the line to comply with BACT requirements.

**Compliance Demonstration Method:**

Compliance shall be demonstrated through performance tests, monitoring of control equipment parameters and record keeping. See Compliance Plan, Section D.

Refer to GROUP REQUIREMENTS for Subpart PPPP emission limitations.

**3. Testing Requirements:**

The permittee shall perform stack testing according to the standards and schedule specified in the Periodic Monitoring Requirements table. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4. Refer to GROUP REQUIREMENTS for Subpart PPPP testing requirements.

**4. Specific Monitoring Requirements:**

The permittee shall conform to the monitoring requirements prescribed in the periodic monitoring requirements table. The permittee shall monitor raw material usages as necessary to demonstrate compliance with all requirements of this permit.

**SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****4. Specific Monitoring Requirements (Continued):**

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack(s) when the emission unit is in operation on a weekly basis and maintain a log of the observations. A Method 9 reading by a certified visible emissions observer shall also be performed once a calendar quarter, simultaneous with the qualitative observation, to quantify the visible emissions. If four consecutive quarters indicate opacity emissions less than 20%, subsequent testing shall be conducted on a 12-month basis. In addition, if, during the weekly qualitative observation, visible emissions from the stack (s) are seen (not including condensed water vapor within the plume), then the opacity shall be determined by a Method 9 reading. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs. Subsequently, the requirement to perform quarterly Method 9 readings will be reinstated.

The permittee shall install, calibrate, maintain, and operate monitoring devices, which indicate the operating temperatures of the thermal oxidizers. The monitoring devices shall have an accuracy of the greater of +/- 1.0 percent of the temperature being measured expressed in degrees Fahrenheit or +/- 5.0°F. The monitoring devices shall be connected to a device(s) that records the temperature via a strip chart, electronic media, or other means.

The permittee shall install, calibrate, maintain, and continuously operate devices to monitor velocity within the PTE at locations established during the Method 204 compliance test that demonstrated natural draft opening facial velocities of at least 200 feet per minute and a capture efficiency of 100%. The monitoring devices shall be connected to a device(s) that records the velocity via a strip chart, electronic media, or other means.

Refer to GROUP REQUIREMENTS for Subpart PPPP monitoring requirements.

**5. Specific Record Keeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in the Periodic Monitoring Requirements table.

In addition, for all required emissions control equipment, the permittee shall keep the following records:

- a. Design and/or manufacturer's specifications.
- b. Preventive maintenance records related to performance of control equipment.
- c. All periods, during normal operating conditions, where parameters listed in the periodic monitoring requirements table are "out of standard". For thermal oxidizers, "out of standard" is defined as a confirmed three-hour period during which the average of the monitored values fails to meet the specified temperature requirements when the process has been in operation the entire three-hour period.
- d. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is not operating.
- e. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is bypassed.
- f. Description of operating, temperature-measuring devices (e.g., automatic strip charts, digital data acquisition systems).

## **SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **5. Specific Record Keeping Requirements (Continued):**

- g. Data from the temperature-measuring devices (as prescribed by the periodic monitoring requirements table) and any temporary data logged manually as back up.
- h. Inspection reports and maintenance performed in response to recommendations in inspection reports.
- i. Monitoring system malfunctions.
- j. Corrective actions taken in response to “out of standard” conditions as specified in the periodic monitoring requirements table.
- k. Calibration records for monitoring equipment specified in the periodic monitoring requirements table.

#### **Thermal Oxidizer Specific Record Keeping Requirements:**

The permittee shall maintain records of the following information for the thermal oxidizer: All 3-hour periods (during coating operations) during which the average combustion chamber temperature of the thermal oxidizer is below the average combustion chamber temperature of the thermal oxidizer determined during the most recent performance test which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements. See Section F.6.

The permittee shall keep calendar month records of usage of all applicable raw materials. Following the end of each month, Volatile Organic Compound (VOC) emissions shall be calculated on a twelve-month rolling total and recorded. These records shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality.

The permittee shall keep monthly records of fuel used and report startups, shutdowns, or malfunctions.

The permittee shall keep records documenting the results of each opacity reading by EPA Reference Method 9.

The permittee shall keep records documenting the results of any required inspection and repair, as a result of a recorded opacity over 20%.

The permittee shall retain each record required by this permit for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be kept onsite for a minimum of 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records may be kept offsite for the remaining 3 years.

Refer to GROUP REQUIREMENTS for Subpart PPPP record keeping requirements.



## **SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**6. Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring and record keeping information listed in Sections B.4 and B.5 of this permit. (See Section F.6 for specific reporting dates.) The report shall list any “out of standard” conditions for periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no “out of standard” conditions occurred, the permittee shall submit a negative report.

Refer to GROUP REQUIREMENTS for Subpart PPPP reporting requirements.

**7. Specific Control Equipment Operating Conditions:**

**Specific Operating Limitations for Thermal Oxidizers:**

- A. The average combustion chamber temperature in any 3-hour period shall not fall below the combustion temperature limit established during the most recent performance test, which demonstrated compliance.
- B. The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature. This average combustion temperature is the minimum set point and operating limit for the thermal oxidizer.

**Compliance Demonstration Method:**

The permittee must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs. The combustion temperature shall be monitored during operation. Compliance shall be demonstrated by monitoring and recording the combustion temperature as required by the periodic monitoring requirements table, averaged over 3 hours.

**Specific Operating Limitations for Permanent Total Enclosures:**

- A. The direction of air flow at all times must be into the enclosure.
- B. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or
- C. The pressure drop across the enclosure must be at least 0.007 inch H<sub>2</sub>O, as established in Method 204 of appendix M to 40 CFR part 51.

**Compliance Demonstration Method:**

Compliance shall be demonstrated by monitoring and recording the supply air ducts entrance and exit velocities and the vestibule exhaust velocity as required by the periodic monitoring requirements table. By fulfilling these requirements it will be ensured that the minimum velocities necessary to maintain the 200 fpm facial velocity for the NDOs and the minimum pressure drop limit of -0.007 inches of water across the enclosure as measured during the most recent Method 204 test are met. Fulfilling these requirements will also ensure that the direction of air flow is into the enclosure.

See Compliance Plan, Section D.

Refer to GROUP REQUIREMENTS for Subpart PPPP specific control equipment operating limitations.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### PERIODIC MONITORING REQUIREMENTS

Emission Unit	Operation	Equipment Monitored	Characteristic Monitored	Parameter Monitored	Method or Device	Monitoring Frequency	Recording Frequency	Calibration Frequency	Standard Range
<b>02 (S9A)</b>	High Gloss	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Continuous	15-Minute Averages & Intermittent Problem Log	Quarterly	Not below temperature established during last compliance test, 3 Hour Avg.
<b>02 (S9A)</b>	High Gloss	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Continuous	15-Minute Averages	Quarterly	Set Point = Average Temperature established during performance test
<b>02 (S9A)</b>	High Gloss	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years	Every 5 Years	Each Test	See Section B.2, Compliance Demonstration Method
<b>02 (S9A)</b>	High Gloss	PTE entrance supply air	Capture Efficiency (%)	Supply Air Duct Velocity (feet/minute)	Velocity Monitor	Continuous	15-Minute Averages	Quarterly	See Compliance Plan, Section D
<b>02 (S9A)</b>	High Gloss	PTE exit supply air	Capture Efficiency (%)	Supply Air Duct Velocity (feet/minute)	Velocity Monitor	Continuous	15-Minute Averages	Quarterly	See Compliance Plan, See Section D
<b>02 (S9A)</b>	High Gloss	Vestibule Exhaust duct	Capture Efficiency (%)	Vestibule Exhaust Duct Velocity (feet/minute)	Velocity Monitor	Continuous	15-Minute Averages	Quarterly	See Compliance Plan, See Section D
<b>02 (S9A)</b>	High Gloss	Vestibule	Capture Efficiency (%)	Vestibule Exhaust Duct Velocity (feet/minute)	Velocity Monitor	Each Occurrence of Set Point Change	Each Occurrence of Set Point Change	Quarterly	See Compliance Plan, Section D

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### PERIODIC MONITORING REQUIREMENTS

Emission Unit	Operation	Equipment Monitored	Characteristic Monitored	Parameter Monitored	Method or Device	Monitoring Frequency	Recording Frequency	Calibration Frequency	Standard Range
<b>02 (S9A)</b>	High Gloss	RTO / PTE	All VOC routed to RTO	Bypass Damper position	Alarm	Continuous	Intermittent (Problem Log)	Monthly	No Faults
<b>02 (S9A)</b>	High Gloss t	Down-draft water wash system	PM Removal Efficiency (%)	Water Gaps	Visual	Daily	Daily	N/A	No Significant Gaps
<b>02 (S9A)</b>	High Gloss	Primer Booth, Basecoat Booth and Clearcoat Booth exhaust	Emission Rate	Particulate Emission	Stack Test (EPA Method 5) or Engineering Evaluation	Every 5 years	Every 5 years	Each Test	See Section B.2
<b>02 (S9A)</b>	High Gloss West	Down-draft water wash system	Opacity	Visible emissions	Qualitative visual observation or Method 9 Test	Weekly	Weekly	N/A	See Section B.4
<b>02 (S9A)</b>	High Gloss	Filters in three (3) air houses for prime, base and clear operations	PM Removal Efficiency (%)	Pressure Drop	Magnehelic gauge	Daily	Daily	Annual	No more than 2.0 inches of water

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **03 (SL3, SL4 SL5, SL6)**

Low Gloss Painting System consisting of:  
East Line: one (1) topcoat booth – 6 manual applicators  
West Line: one (1) topcoat booth – 6 manual applicators  
Dual line cure ovens (two ovens rate at 1.2 MMBTU/HR)  
Cleanup solvent use  
Construction Date: November, 1997  
Control Equipment: Permanent Total Enclosure (PTE) vented to four (4) Regenerative Thermal Oxidizers (RTO) for control of volatile organic compound (VOC) emissions; Water wash system for control of particulate matter emissions

### **APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality is applicable to a major stationary source or a major modification which;

- (1) Commenced construction after September 22, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act); and
- (3) Is constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

401 KAR 59:010, New process operations, is applicable to each affected facility or source, associated with process operations, which are not subject to another emission standard with respect to particulate matter emissions commenced after July 2, 1975.

40 CFR 63, Subpart PPPP, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Products is applicable within the term of this permit. Refer to GROUP Requirements for applicability details.

### **1. Operating Limitations:**

The usage rate of materials used in all affected facilities shall be limited so as to not exceed the emission limitations in Section B2.

Good operating practices to minimize the use of VOC-containing materials shall be used as appropriate. Additionally, all purging activities shall be performed into a container so as to optimize work practice standards and minimize VOC emissions.

Refer to GROUP REQUIREMENTS for Subpart PPPP operating limitations.

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**2. Emission Limitations:**

**401 KAR 59:010: §3** The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity.

**Compliance Demonstration Method:**

- A) See Monitoring Requirements, B.4
- B) See Periodic Monitoring Requirements table.

**401 KAR 59:010: §3** Particulate emissions shall not equal or exceed 2.34 lb/hr.

**Compliance Demonstration Method:**

The total process weight, "P" as defined above must reflect a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period. This period shall not exceed 24 hours. Continuous compliance shall be assured by adhering to the monitoring and record keeping requirements in the periodic monitoring requirements table.

**401 KAR 51:017**

The permittee shall demonstrate 85% overall control of VOC emissions for the line to comply with BACT requirements.

**Compliance Demonstration Method:**

Compliance shall be demonstrated through performance tests, monitoring of control equipment parameters and record keeping. See Compliance Plan, Section D.

Refer to GROUP REQUIREMENTS for Subpart PPPP emission limitations.

**3. Testing Requirements:**

The permittee shall perform stack testing according to the standards and schedule specified in the Periodic Monitoring Requirements table. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

Refer to GROUP REQUIREMENTS for Subpart PPPP testing requirements.

**4. Specific Monitoring Requirements:**

The permittee shall conform to the monitoring requirements prescribed in the periodic monitoring requirements table. The permittee shall monitor raw material usages as necessary to demonstrate compliance with all requirements of this permit.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****4. Specific Monitoring Requirements (Continued):**

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack(s) when the emission unit is in operation on a weekly basis and maintain a log of the observations. A Method 9 reading by a certified visible emissions observer shall also be performed once a calendar quarter, simultaneous with the qualitative observation, to quantify the visible emissions. If four consecutive quarters indicate opacity emissions less than 20%, subsequent testing shall be conducted on a 12-month basis. In addition, if, during the weekly qualitative observation, visible emissions from the stack (s) are seen (not including condensed water vapor within the plume), then the opacity shall be determined by a Method 9 reading. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs. Subsequently, the requirement to perform quarterly Method 9 readings will be reinstated.

The permittee shall install, calibrate, maintain, and operate monitoring devices, which indicate the operating temperatures of the thermal oxidizers. The monitoring devices shall have an accuracy of the greater of +/- 1.0 percent of the temperature being measured expressed in degrees Fahrenheit or +/- 5.0°F. The monitoring devices shall be connected to a device(s) that records the temperature via a strip chart, electronic media, or other means.

The permittee shall install, calibrate, maintain, and continuously operate a device to monitor pressure drop within the PTE at the location established during the Method 204 compliance test that demonstrated a pressure drop across the enclosure of at least 0.007 inches H<sub>2</sub>O and a capture efficiency of 100%. The monitoring device shall be connected to a device(s) that records the pressure drop via a strip chart, electronic media, or other means.

Refer to GROUP REQUIREMENTS for Subpart PPPP specific monitoring requirements.

**5. Specific Record Keeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in the Periodic Monitoring Requirements table.

In addition, for all required emissions control equipment, the permittee shall keep the following records:

- a. Design and/or manufacturer's specifications.
- b. Preventive maintenance records related to performance of control equipment.
- c. All periods, during normal operating conditions, where parameters listed in the periodic monitoring requirements table are "out of standard". For thermal oxidizers, "out of standard" is defined as a confirmed three-hour period during which the average of the monitored values fails to meet the specified temperature requirements when the process has been in operation the entire three-hour period.
- d. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is not operating.
- e. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is bypassed.

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **5. Specific Record Keeping Requirements (Continued):**

- f. Description of operating, temperature-measuring devices (e.g., automatic strip charts, digital data acquisition systems).
- g. Data from the temperature-measuring devices (as prescribed by the periodic monitoring requirements table) and any temporary data logged manually as back up.
- h. Inspection reports and maintenance performed in response to recommendations in inspection reports.
- i. Monitoring system malfunctions.
- j. Corrective actions taken in response to “out of standard” conditions as specified in the periodic monitoring requirements table.
- k. Calibration records for monitoring equipment specified in the periodic monitoring requirements table.

#### **Thermal Oxidizer Specific Record Keeping Requirements:**

The permittee shall maintain records of the following information for the thermal oxidizer: All 3-hour periods (during coating operations) during which the average combustion chamber temperature of the thermal oxidizer is below the average combustion chamber temperature of the thermal oxidizer determined during the most recent performance test which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements. See Section F.6.

The permittee shall keep calendar month records of usage of all applicable raw materials. Following the end of each month, Volatile Organic Compound (VOC) emissions shall be calculated on a twelve month rolling total and recorded. These records shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality.

The permittee shall keep monthly records of fuel used and report startups, shutdowns, or malfunctions.

The permittee shall keep records documenting the results of each opacity reading by EPA Reference Method 9.

The permittee shall keep records documenting the results of any required inspection and repair, as a result of a recorded opacity over 20%.

The permittee shall retain each record required by this permit for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be kept onsite for a minimum of 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records may be kept offsite for the remaining 3 years.

Refer to GROUP REQUIREMENTS for Subpart PPPP record keeping requirements.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****6. Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring and recordkeeping information listed in Sections B.4 and B.5 of this permit. (See Section F.6 for specific reporting dates.) The report shall list any “out of standard” conditions for periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no “out of standard” conditions occurred, the permittee shall submit a negative report.

Refer to GROUP REQUIREMENTS for Subpart PPPP specific reporting requirements.

**7. Specific Control Equipment Operating Conditions:****Specific Operating Limitations for Thermal Oxidizers:**

- A. The average combustion chamber temperature in any 3-hour period shall not fall below the combustion temperature limit established during the most recent performance test, which demonstrated compliance.
- B. The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature. This average combustion temperature is the minimum set point and operating limit for the thermal oxidizer.

**Compliance Demonstration Method:**

The permittee must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs. The combustion temperature shall be monitored during operation. Compliance shall be demonstrated by monitoring and recording the combustion temperature as required by the periodic monitoring requirements table, averaged over 3 hours.

**Specific Operating Limitations for Permanent Total Enclosures:**

- A. The direction of air flow at all times must be into the enclosure.
- B. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or
- C. The pressure drop across the enclosure must be at least 0.007 inch H<sub>2</sub>O, as established in Method 204 of appendix M to 40 CFR part 51.

**Compliance Demonstration Method:**

Compliance shall be demonstrated by monitoring and recording the pressure drop as required by the periodic monitoring requirements table to ensure that it meets the minimum pressure differential requirement across the enclosure of – 0.007 inches of water and the direction of air flow is into the enclosure.

Refer to GROUP REQUIREMENTS for Subpart PPPP specific control equipment operating conditions.



## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### PERIODIC MONITORING REQUIREMENTS

Emission Unit	Operation	Equipment Monitored	Characteristic Monitored	Parameter Monitored	Method or Device	Monitoring Frequency	Recording Frequency	Calibration Frequency	Standard Range
<b>03 (SL3, SL4, SL5, SL6)</b>	Low Gloss	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Continuous	15-Minute Averages & Intermittent Problem Log	Quarterly	Not below temperature established during last compliance test, 3 Hour Avg.
<b>03 (SL3, SL4, SL5, SL6)</b>	Low Gloss	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Continuous	15-Minute Averages	Quarterly	Setpoint = Average Temperature established during performance test
<b>03 (SL3, SL4, SL5, SL6)</b>	Low Gloss	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years	Every 5 Years	Each Test	See Section B.2, Compliance Demonstration Method
<b>03 (SL3, SL4, SL5, SL6)</b>	Low Gloss	Low Gloss PTE near Resist Paint Booth	Capture Efficiency (%)	Pressure Differential across enclosure (in. H <sub>2</sub> O)	Pressure Differential Monitor (in. H <sub>2</sub> O)	Continuous	15-Minute Averages	Quarterly	Minimum pressure differential of –0.007 inches of H <sub>2</sub> O
<b>03 (SL3, SL4, SL5, SL6)</b>	Low Gloss	RTO / PTE	All VOC routed to RTO	By-Pass Damper Position	Alarm	Continuous	Intermittent (Problem Log)	Monthly Confirmation	No Faults
<b>03 (SL3, SL4, SL5, SL6)</b>	Low Gloss	Water wash system	PM Removal Efficiency (%)	Water Gaps	Visual	Daily	Daily	N/A	No Significant Gaps
<b>03 (SL3, SL4, SL5, SL6)</b>	Low Gloss	Spray Booth Exhaust	Emission Rate	Particulate Emission	Stack Test (EPA Method 5) or Engineering Evaluation	Every 5 years	Every 5 years	Each Test	See Section B.2
<b>03 (SL3, SL4, SL5, SL6)</b>	Low Gloss	Water wash system	Opacity	Visible emissions	Qualitative visual observation or Method 9 Test	Weekly	Weekly	N/A	See Section B.4

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**04 (SE1)** Chrome Pre-Plating Line consisting of:  
Tank 319 – Neutralizer, Tank 324 – Pre-Dip, Tank 325 – Activator,  
Tank 329 – Accelerator, Tanks 333, 334 & 335 – Electroless Nickel,  
Tanks 342 & 343 – Acid Strike,  
Construction Date: December, 1996  
Control Equipment: Pre-Plate Wet Scrubber #1 for control of particulate matter, Cu, HCl, NaCl, Hydrazine and H<sub>2</sub>SO<sub>4</sub>  
Chrome Scrubber #1 Description:  
Packed bed scrubber with demister, equipped with magnehelic type pressure gauge

### **APPLICABLE REGULATIONS:**

401 KAR 59:010, New process operations, is applicable to each affected facility or source, associated with process operations, which are not subject to another emission standard with respect to particulate matter emissions commenced after July 2, 1975.

401 KAR 63:020, Potentially hazardous matter or toxic substances, applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances.

1. **Operating Limitations:** The usage rate of raw materials used in all affected facilities shall be limited so that the emission limitations set forth in item 2, below, are not exceeded.
2. **Emission Limitations:**
  - A. 401 KAR 59:010 § 3(1) Opacity Standard: The opacity of continuous emissions from a control device or stack shall be less than twenty (20) percent opacity.
  - B. 401 KAR 59:010 § 3(2) Mass Standard: Particulate matter emissions from a control device or stack shall not exceed 2.34 pounds per hour.
  - C. 401 KAR 63:020 § 3: No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health or welfare of humans, animals and plants.

### **Compliance Demonstration Method for Emission Limitation A:**

Compliance with the opacity standards shall be determined by the permittee performing a qualitative visual observation of the opacity of emissions at the stack no less than weekly and maintaining a log of the observations. If visible emissions from the stack are seen (not including condensed water in the plume), then an inspection of control equipment shall be initiated and corrective action taken. If visible emissions are present after the corrective action, the process shall be shut down and shall not operate again until repairs have been made that result in no visible emissions from the process during operation. In lieu of shutting the process down, the permittee may determine the opacity using Reference Method 9. If the opacity limit is not exceeded, the process may continue to operate.

### **Compliance Demonstration Method for Emission Limitation B:**

Compliance with the mass standards will be assumed unless testing is required, when the units are in compliance with the opacity standards.

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **3. Testing Requirements:**

- A. If the Division requires it, permittee shall perform a Reference Method 5 test, or other methods approved by the Division, to determine the emission rate of particulate matter. [401 KAR 59:010, § 4(1) Test Methods and Procedures]
- B. If the Division requires it, the permittee shall perform a Reference Method 9 test to determine the opacity of continuous emissions.  
[401 KAR 59:010, § 4 (5) Test Methods and Procedures]

### **4. Specific Monitoring Requirements:**

- A. The permittee shall monitor monthly and annual pounds of surface treatment solution consumed by each tank.
- B. The permittee shall monitor the opacity of emissions from each stack weekly as described in Compliance Demonstration Method A of Emission Limitation A.
- C. The permittee shall monitor the pressure differential in inches water column measured across the inlet and outlet ducts of the scrubber using a pressure differential measuring instrument daily.
- D. The permittee shall monitor the scrubber liquid flow rate in gallons per minute or cubic feet per minute measured at the scrubbers' liquid inlet using a liquid flow meter or other device for liquid flow daily.

### **5. Specific Record Keeping Requirements:**

- A. The permittee shall maintain monthly records of pounds of surface treatment solution consumed by each tank.
- B. The permittee shall maintain a daily log of visual observations of the opacity of emissions. On days a controlled process associated with a stack does not operate, "did not operate" shall be entered in the log.
- C. The permittee shall maintain records of any corrective actions taken as a result of the presence of visible emissions being detected during an observation.
- D. The permittee shall maintain records of the results of any Method 9 readings performed.
- E. The permittee shall maintain a log of daily scrubber pressure differential readings. On days a scrubber does not operate, "did not operate" shall be entered in the log.
- F. The permittee shall maintain a log of daily scrubber liquid flow rate readings. On days a scrubber does not operate, "did not operate" shall be entered in the log.
- G. The permittee shall maintain records of manufacturer recommended operating parameters for the pre-plating tanks and scrubber.
- H. The permittee shall maintain records of calibrations of scrubber pressure differential and liquid flow rate measuring instruments and devices.

### **6. Specific Reporting Requirements:**

The semiannual monitoring reports required by this permit (see SECTION F(5)) shall be required to contain only records of the following:

- A. Monthly records of the pounds of surface treatment solutions added to tanks.
- B. Records of visible emissions from the stack(s) during the reporting period, including date and time.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**7. Specific Control Equipment Operating Conditions:**

- A. The scrubber shall be in place and operating efficiently while the pre-plating line is in operation.
- B. The permittee shall calibrate, maintain and operate instruments and devices used to monitor the scrubber pressure differential and liquid flow rate using procedures that take into account manufacturer's recommendations no less than quarterly.

**Compliance Demonstration Method for Specific Control Equipment Operating Limitations A and B:** Refer to Monitoring and Recordkeeping Requirements.

**8. Alternate Operating Scenarios:**

N/A

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**5(SE2)** Chrome Plating Line consisting of:  
Tanks 309, 310, 311 – ABS etch, Tank 434 – Pre-dip, Tank 435 – Chrome Plate, Tank 300 – Chrome Strip  
Control Equipment: Etch Strip Scrubber #7 and Chrome Scrubber #2 for control of particulate matter Cr, H<sub>2</sub>SO<sub>4</sub> and NaHSO<sub>4</sub>  
Construction Date: November, 1997  
Chrome Scrubber #2 Description:  
One 24,000 CFM Chrome Ventilation system  
The system consists of:  
One SCSV 18,000 CFM vertical 3-stage composite mesh pad Chrome Separator/Hood Combination with periodic rinse  
Includes magnehelic type gauges to monitor pressure drop across the pad for each stage.

### **APPLICABLE REGULATIONS:**

40 CFR 63, Subpart N – National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks.

401 KAR 59:010, New process operations, is applicable to each affected facility or source, associated with process operations, which are not subject to another emission standard with respect to particulate matter emissions commenced after July 2, 1975.

401 KAR 63:020, Potentially hazardous matter or toxic substances, applicable to each affected facility which emits or may potentially emit hazardous matter or toxic substances.

### **1. Operating Limitations:**

**(Tank #435 only)** § 63.342(d)(2)

- A. If a chemical fume suppressant containing a wetting agent is used, the surface tension of the electroplating or anodizing bath contained within the affected source shall not exceed 45 dynes per centimeter (dynes/cm) as measured with a stalagmometer, or 35 dynes/cm as measured with a tensiometer, at any time during operation of the tank.

**(Tank #435 only)** § 63.342(f)

B. Work practice standards:

1. At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain any affected source, including associated air pollution control devices and monitoring equipment, in a manner consistent with good air pollution control practices, consistent with the operation and maintenance plan described in 5(C) of this section.
2. Malfunctions shall be corrected as soon as practicable after their occurrence in accordance with the operation and maintenance plan required by paragraph 3 of §63.342(f).

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **1. Operating Limitations:**

- C. The usage rate of raw materials used in all affected facilities shall be limited so that the emission limitations set forth in item 2, below, are not exceeded.

### **2. Emission Limitations:**

**(Tank #435 only)** § 63.342(d)(1)

- A. The concentration of total chromium in the exhaust gas stream discharged to the atmosphere shall not exceed 0.01 mg/dscm ( $4.4 \times 10^{-6}$  gr/dscf).

#### **Compliance Demonstration Method:**

The affected source shall be considered to meet this limit if operated according to the conditions set forth in 1. **Operating Limitations** (A) & (B), above.

**(Tanks #309, 310, 311, Tank #434, Tank #435 & Tank #300)**

- B. 401 KAR 59:010 §3,
1. Particulate emissions from each control device or stack shall not exceed 2.34 pounds/hour.
  2. Visible emissions from each control device or stack shall not exceed 20% opacity.

#### **Compliance Demonstration Method for Emission Limitations 1:**

Compliance with the mass standards will be assumed unless testing is required, when the units are in compliance with the opacity standards.

#### **Compliance Demonstration Method for Emission Limitation 2:**

Compliance with the opacity standards shall be determined by the permittee performing a qualitative visual observation of the opacity of emissions at the stack no less than weekly and maintaining a log of the observations. If visible emissions from the stack are seen (not including condensed water in the plume), then an inspection of control equipment shall be initiated and corrective action taken. If visible emissions are present after the corrective action, the process shall be shut down and shall not operate again until repairs have been made that result in no visible emissions from the process during operation. In lieu of shutting the process down, the permittee may determine the opacity using Reference Method 9. If the opacity limit is not exceeded, the process may continue to operate.

**(Tanks #309, 310, 311, Tank #434, Tank #435 & Tank #300)**

- C. 401 KAR 63:020 §3,
- No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health or welfare of humans, animals and plants.

#### **Compliance Demonstration Method:**

See Testing Requirements.

### **3. Testing Requirements:**

- A. If the Division requires it, permittee shall perform a Reference Method 5 test, or other methods approved by the Division, to determine the emission rate of particulate matter. [401 KAR 59:010, § 4(1) Test Methods and Procedures]

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****3. Testing Requirements (Continued):**

- B. If the Division requires it, the permittee shall perform a Reference Method 9 test to determine the opacity of continuous emissions. [401 KAR 59:010, § 4 (5) Test Methods and Procedures]
- C. EPA Test Methods 306 or 306A or alternative test method(s) approved by the Division shall be used to determine the emissions of chromium entering and exiting Etch Strip Scrubber #7 and Chrome Scrubber #2. The permittee shall determine each scrubber's chromium removal efficiency and establish pressure drop values across each scrubber no later than 180 days from the issuance of this permit. The permittee shall use the results from the performance test in conjunction with ISCST3 air dispersion model (or a comparable model) to determine the maximum concentration of chromium at or beyond the property boundary of the facility. If the determined concentration results in a cancer risk at or below  $1 \times 10^{-4}$ , then the affected facility shall be deemed in compliance with 401 KAR 63:020. Cancer risk shall be calculated from the following equation:

$$Risk = C_{air} \times URE$$

Where URE means the following:

Unit risk estimate (URE)  $1/(\mu\text{g}/\text{m}^3)$

Upper-bound excess lifetime cancer risk estimated to result from continuous exposure of an agent at  $1 \mu\text{g}/\text{m}^3$  in air, meaning it represents a plausible upper limit to the true value. (Note that this is usually not a true statistical confidence limit.) The true risk is likely to be less, but could be greater. The URE for chromium shall be referenced from the U.S. EPA's Office of Air Quality Planning and Standards (OAQPS) Prioritized Chronic Dose Response Values (PDRV), Table 1.

**4. Specific Monitoring Requirements:****Monitoring Schedule, Tank #435, Plating Bath: §63.343(c)(5)(ii)**

- A. The surface tension shall be measured once every 40 hours during operation of the tank with a stalagmometer or a tensiometer as specified in Method 306B, Appendix A of 40 CFR 63, Subpart N.
- B. The time between monitoring must be adjusted if an exceedance occurs. The surface tension shall be measured once every 4 hours of tank operation for the first 40 hours of tank operation after the exceedance occurred. Once there are no exceedances during 40 hours of tank operation, surface tension measurement may be conducted once every 8 hours of tank operation. Once there are no exceedances during another 40 hours of tank operation, surface tension measurement may be conducted once every 40 hours of tank operation on an ongoing basis, until an exceedance occurs. The minimum frequency of monitoring allowed is once every 40 hours of tank operation.
- C. Once a bath solution is drained from the affected tank and a new solution added, the original monitoring schedule of once every 4 hours must be resumed, with a decrease in monitoring frequency allowed following the procedures of paragraph (B) above.

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**4. Specific Monitoring Requirements (Continued):**

**(Tanks #309, 310, 311, Tank #434, Tank #435 & Tank #300)**

- D. The permittee shall monitor monthly and annual ampere-hours used by each tank.
- E. The permittee shall monitor the opacity of emissions from each stack daily as described in Compliance Demonstration Method 2 of Emission Limitation B.
- F. The permittee shall monitor the pressure differential in inches water column measured across the inlet and outlet ducts of each scrubber using a pressure differential measuring instrument daily.
- G. The permittee shall monitor each scrubber liquid flow rate in gallons per minute or cubic feet per minute measured at the scrubbers' liquid inlet using a liquid flow meter or other device for liquid flow daily.

**5. Specific Record Keeping Requirements:**

**(Tank #435 only) Operation and maintenance plan:**

- A. The operation and maintenance plan on file at the facility shall include the following elements:
  - 1. The plan shall specify the operation and maintenance criteria for the affected source and the process and control system monitoring equipment, and shall include a standardized checklist to document the operation and maintenance of this equipment;
  - 2. The plan shall incorporate the work practice standards for that device or monitoring equipment, as identified in Table 1 of §63.342;
  - 3. The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur; and,
  - 4. The plan shall include a systematic procedure for identifying malfunctions of process equipment and process and control system monitoring equipment and for implementing corrective actions to address such malfunctions.
- B. If the operation and maintenance plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the permittee shall revise the operation and maintenance plan **within 45 days** after such an event occurs. The revised plan shall include procedures for operating and maintaining the process equipment, or monitoring equipment during similar malfunction events, and a program for corrective action of such events.
- C. If actions taken by the permittee during periods of malfunction are inconsistent with the procedures specified in the operation and maintenance plan, the permittee shall record the actions taken for that event and shall report by phone such actions within 2 working days after commencing actions inconsistent with the plan. This report shall be followed by a letter **within 7 working days** after the end of the event, unless the permittee makes alternative reporting arrangements, in advance, with the Division.
- D. The permittee may utilize applicable standard operating procedure (SOP) manuals, Occupational Safety and Health Administration (OSHA) plans, or other existing plans, in the operation and maintenance plan, provided the alternative plans meet the requirements of this section.



**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****5. Specific Record Keeping Requirements (Continued):**

- E. Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Division, which may include, but is not limited to, monitoring results; review of the operation and maintenance plan, procedures, and records; and inspection of the source.

**(Tank #435 only) Operation and maintenance plan:**

- F. Based on the results of a determination made under paragraph 2(i) of §63.342(f), the Division may require that the permittee make changes to the operation and maintenance plan. Revisions may be required if the Division finds that the plan:
1. Does not address a malfunction that has occurred;
  2. Fails to provide for the operation of the affected source, the air pollution control techniques, or the control system and process monitoring equipment during a malfunction in a manner consistent with good air pollution control practices; or
  3. Does not provide adequate procedures for correcting malfunctioning process equipment, air pollution control techniques, or monitoring equipment as quickly as practicable.
- G. The permittee shall keep the written operation and maintenance plan on record after it is developed to be made available for inspection, upon request, by the Division for the life of the affected source or until the source is no longer subject to the provisions of Chapter 63, Subpart N. In addition, if the operation and maintenance plan is revised, the permittee shall keep previous (i.e. superseded) versions of the operation and maintenance plan on record to be made available for inspection, upon request, by the Division for a period of 5 years after each revision to the plan.
- H. Additional Records: §63.346(b)
1. Maintenance performed on the affected source, or on monitoring equipment;
  2. Records of the occurrence, duration, and cause (if known) of each malfunction of process, and monitoring equipment;
  3. Records of actions taken during periods of malfunction when such actions are inconsistent with the operation and maintenance plan;
  4. Other records, which may take the form of checklists, necessary to demonstrate consistency with the provisions of the operation and maintenance plan;
  5. Test reports documenting results of all performance tests;
  6. All measurements as may be necessary to determine the conditions of performance tests;
  7. Records of monitoring data required by **4. Specific Monitoring Requirements** that are used to demonstrate compliance with 40 CFR 63 Subpart N, including the date and time the data are collected;
  8. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during malfunction of the process, or monitoring equipment;
  9. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions, as indicated by monitoring data, that occurs during periods other than malfunction of the process, or monitoring equipment;
  10. The total process operating time of the affected source during the reporting period;

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **5. Specific Record Keeping Requirements (Continued):**

#### **(Tank #435 only) Operation and maintenance plan:**

11. Records of the date and time that fume suppressants are added to the electroplating or anodizing bath;
  12. Documentation supporting the notifications and reports required by **6. Specific Reporting Requirements.**
- I. The permittee shall maintain monthly records of ampere-hours used by each tank.
  - J. The permittee shall maintain a daily log of visual observations of the opacity of emissions. On days a controlled process associated with a stack does not operate, "did not operate" shall be entered in the log.
  - K. The permittee shall maintain records of any corrective actions taken as a result of the presence of visible emissions being detected during an observation.
  - L. The permittee shall maintain records of the results of any Method 9 readings performed.
  - M. The permittee shall maintain a log of daily scrubber pressure differential readings. On days a scrubber does not operate, "did not operate" shall be entered in the log.
  - N. The permittee shall maintain a log of daily scrubber liquid flow rate readings. On days a scrubber does not operate, "did not operate" shall be entered in the log.
  - O. The permittee shall maintain records of manufacturer recommended operating parameters for the chrome plating tanks and scrubber.
  - P. The permittee shall maintain records of calibrations of scrubber pressure differential and liquid flow rate measuring instruments and devices.

### **6. Specific Reporting Requirements:**

#### **A. Methods of Reporting:**

Reports may be sent by U.S. mail, fax, another courier, or if acceptable to both the permittee and the Division, by electronic media.

1. Submittals sent by U.S. mail shall be postmarked on or before the specified date.
2. Submittals sent by other methods shall be received by the Division on or before the specified date.

#### **B. (Tank #435 only) Ongoing Compliance Status Reports:**

The permittee shall prepare a summary report to document the ongoing compliance status of the affected source.

1. If there are no exceedances, the report shall be completed **annually** and retained on site, and made available to the Division upon request.
2. If the following two conditions are met, **semiannual** reports shall be completed and submitted to the Division's Frankfort Regional Office:
  - a) The total duration of excess emissions (as indicated by the monitoring data collected by the permittee in accordance with **4. Specific Monitoring Requirements**, is 1 percent or greater of the total operating time for the reporting period; and
  - b) The total duration of malfunctions of the air pollution control device and monitoring equipment is 5 percent or greater of the total operating time.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****6. Specific Reporting Requirements (Continued):**

3. The Division may determine on a case-by-case basis that the summary report shall be completed more frequently and submitted, or that the annual report shall be submitted instead of being retained on site, if these measures are necessary to accurately assess the compliance status of the source.
4. A permittee currently required to submit ongoing compliance status reports on a semiannual or more frequent basis, or that is required to submit the annual report instead of retaining it at the site, may change to the requirements in B.1 above if all of the following conditions are met:
  - a) For 1 full year, the ongoing compliance status reports demonstrate that the affected source is in compliance with the relevant emission limit;
  - b) The permittee continues to comply with all applicable record keeping and monitoring requirements;
  - c) The Division does not object to a reduced reporting frequency for the affected source.
  - d) Procedures for reducing frequency and submittals of reports can be found in paragraphs §63.347 (h)(3)(ii) and (iii).

**B. (Tank #435 only) Ongoing Compliance Status Reports:****5. Contents of Ongoing Compliance Status Reports:**

- a) The company name and address of the affected source;
- b) An identification of the operating parameter that is monitored for compliance determination;
- c) The relevant emission limitation for the affected source, and the operating parameter value, or range of values, that correspond to compliance with this emission limitation;
- d) The beginning and ending dates of the reporting period;
- e) A description of the type of process performed in the affected source;
- f) The total operating time of the affected source during the reporting period;
- g) A summary of operating parameter values, including the total duration of excess emissions during the reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to process upsets, control equipment malfunctions, other known causes, and unknown causes;
- h) A certification by a responsible official, as defined in §63.2, that the work practice standards in §63.342(f) were followed in accordance with the operation and maintenance plan for the source;
- i) If the operation and maintenance plan required by §63.342(f)(3) was not followed, an explanation of the reasons for not following the provisions, an assessment of whether any excess emission and/or parameter monitoring exceedances are believed to have occurred, and a copy of the report required by §63.342(f)(3)(iv) documenting that the operation and maintenance plan was not followed;
- j) A description of any changes in monitoring, processes, or controls since the last reporting period;

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**6. Specific Reporting Requirements (Continued):**

- k) The name, title, and signature of the responsible official who is certifying the accuracy of the report; and
- l) The date of the report.
- C. Monthly records of the ampere-hours used by the tanks during the reporting period .
- D. Records of visible emissions from the stack(s) during the reporting period, including date and time.
- E. All instances when the pressure drop across each scrubber is more than  $\pm 2$  inches water column of the value established during the performance test.

**7. Specific Control Equipment Operating Conditions:**

- A. The scrubbers shall be in place and operating efficiently while the chrome plating line is in operation.
- B. The permittee shall calibrate, maintain and operate instruments and devices used to monitor the scrubber pressure differential and liquid flow rate using procedures that take into account manufacturer's recommendations no less than quarterly.
- C. The pressure drop value of each scrubber must be within  $\pm 2$  inches water column of the average pressure drop measured over the three test runs of the performance test.

**8. Alternate Operating Scenarios:**

N/A

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 6 (SE3)**      Acid copper tanks (402 – 410) and Acid activator tank 414  
Control equipment: Copper Wet Scrubber #3 for control of particulate matter, Cu and H<sub>2</sub>SO<sub>4</sub>  
Construction commenced: December 1996

### **APPLICABLE REGULATIONS:**

401 KAR 59:010, New process operations, is applicable to each affected facility or source, associated with process operations, which are not subject to another emission standard with respect to particulate matter emissions commenced after July 2, 1975.

1.      **Operating Limitations:** The usage rate of raw materials used in all affected facilities shall be limited so that the emission limitations set forth in item 2, below, are not exceeded.
2.      **Emission Limitations:**
  - A. 401 KAR 59:010 § 3(1) Opacity Standard: The opacity of continuous emissions from a control device or stack shall be less than twenty (20) percent opacity.
  - B. 401 KAR 59:010 § 3(2) Mass Standard: Particulate matter emissions from a control device or stack shall not exceed 2.34 pounds per hour.

#### **Compliance Demonstration Method for Emission Limitation A:**

Compliance with the opacity standards shall be determined by the permittee performing a qualitative visual observation of the opacity of emissions at the stack no less than weekly and maintaining a log of the observations. If visible emissions from the stack are seen (not including condensed water in the plume), then an inspection of control equipment shall be initiated and corrective action taken. If visible emissions are present after the corrective action, the process shall be shut down and shall not operate again until repairs have been made that result in no visible emissions from the process during operation. In lieu of shutting the process down, the permittee may determine the opacity using Reference Method 9. If the opacity limit is not exceeded, the process may continue to operate.

#### **Compliance Demonstration Method for Emission Limitations B:**

Compliance with the mass standards will be assumed unless testing is required, when the units are in compliance with the opacity standards.

3.      **Testing Requirements:**
  - A. If the Division requires it, permittee shall perform a Reference Method 5 test, or other methods approved by the Division, to determine the emission rate of particulate matter. [401 KAR 59:010, § 4(1) Test Methods and Procedures]
  - B. If the Division requires it, the permittee shall perform a Reference Method 9 test to determine the opacity of continuous emissions.  
[401 KAR 59:010, § 4 (5) Test Methods and Procedures]

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **4. Specific Monitoring Requirements:**

- A. The permittee shall monitor monthly and annual ampere-hours used by the tanks.
- B. The permittee shall monitor the opacity of emissions from each stack daily as described in Compliance Demonstration Method A of Emission Limitation A.
- C. The permittee shall monitor the pressure differential in inches water column measured across the inlet and outlet ducts of the scrubber using a pressure differential measuring instrument daily.
- D. The permittee shall monitor the scrubber liquid flow rate in gallons per minute or cubic feet per minute measured at the scrubbers' liquid inlet using a liquid flow meter or other device for liquid flow daily.

### **5. Specific Record Keeping Requirements:**

- A. The permittee shall maintain monthly records of the ampere-hours used by the tanks.
- B. The permittee shall maintain a daily log of visual observations of the opacity of emissions. On days a controlled process associated with a stack does not operate, "did not operate" shall be entered in the log.
- C. The permittee shall maintain records of any corrective actions taken as a result of the presence of visible emissions being detected during an observation.
- D. The permittee shall maintain records of the results of any Method 9 readings performed.
- E. The permittee shall maintain a log of daily scrubber pressure differential readings. On days a scrubber does not operate, "did not operate" shall be entered in the log.
- F. The permittee shall maintain a log of daily scrubber liquid flow rate readings. On days a scrubber does not operate, "did not operate" shall be entered in the log.
- G. The permittee shall maintain records of manufacturer recommended operating parameters for the copper plating tanks and scrubber.
- H. The permittee shall maintain records of calibrations of scrubber pressure differential and liquid flow rate measuring instruments and devices.

### **6. Specific Reporting Requirements:**

The semiannual monitoring reports required by this permit (see SECTION F(5)) shall be required to contain only records of the following:

- A. Monthly records of the ampere hours used by the tanks.
- B. Records of visible emissions from the stack(s) during the reporting period, including date and time.

### **7. Specific Control Equipment Operating Conditions:**

- A. The scrubber shall be in place and operating efficiently while the acid copper line is in operation.
- B. The permittee shall calibrate, maintain and operate instruments and devices used to monitor the scrubber pressure differential and liquid flow rate using procedures that take into account manufacturer's recommendations no less than quarterly.

### **8. Alternate Operating Scenarios:**

N/A

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 7 (SE4) Nickel Plating process consisting of:  
Semi-bright tanks (417 – 428), Bright nickel tanks (426 – 428), and Dur-nickel tanks (429 & 430)  
Control equipment: Nickel Wet Scrubber #4 for control of particulate matter, Cu, and H<sub>2</sub>SO<sub>4</sub>  
Construction commenced: December 1996

### **APPLICABLE REGULATIONS:**

401 KAR 59:010, New process operations, is applicable to each affected facility or source, associated with process operations, which are not subject to another emission standard with respect to particulate matter emissions commenced after July 2, 1975.

1. **Operating Limitations:** The usage rate of raw materials used in all affected facilities shall be limited so that the emission limitations set forth in item 2, below, are not exceeded.
2. **Emission Limitations:**
  - A. 401 KAR 59:010 § 3(1) Opacity Standard: The opacity of continuous emissions from a control device or stack shall be less than twenty (20) percent opacity.
  - B. 401 KAR 59:010 § 3(2) Mass Standard: Particulate matter emissions from a control device or stack shall not exceed 2.34 pounds per hour.

#### **Compliance Demonstration Method for Emission Limitation A:**

Compliance with the opacity standards shall be determined by the permittee performing a qualitative visual observation of the opacity of emissions at the stack no less than weekly and maintaining a log of the observations. If visible emissions from the stack are seen (not including condensed water in the plume), then an inspection of control equipment shall be initiated and corrective action taken. If visible emissions are present after the corrective action, the process shall be shut down and shall not operate again until repairs have been made that result in no visible emissions from the process during operation. In lieu of shutting the process down, the permittee may determine the opacity using Reference Method 9. If the opacity limit is not exceeded, the process may continue to operate.

#### **Compliance Demonstration Method for Emission Limitations B:**

Compliance with the mass standards will be assumed unless testing is required, when the units are in compliance with the opacity standards.

3. **Testing Requirements:**
  - A. If the Division requires it, permittee shall perform a Reference Method 5 test, or other methods approved by the Division, to determine the emission rate of particulate matter. [401 KAR 59:010, § 4(1) Test Methods and Procedures]
  - B. If the Division requires it, the permittee shall perform a Reference Method 9 test to determine the opacity of continuous emissions.  
[401 KAR 59:010, § 4 (5) Test Methods and Procedures]

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **4. Specific Monitoring Requirements:**

- A. The permittee shall monitor monthly and annual ampere-hours used by the tanks.
- B. The permittee shall monitor the opacity of emissions from each stack daily as described in Compliance Demonstration Method A of Emission Limitation A.
- C. The permittee shall monitor the pressure differential in inches water column measured across the inlet and outlet ducts of the scrubber using a pressure differential measuring instrument daily.
- D. The permittee shall monitor the scrubber liquid flow rate in gallons per minute or cubic feet per minute measured at the scrubbers' liquid inlet using a liquid flow meter or other device for liquid flow daily.

### **5. Specific Record Keeping Requirements:**

- A. The permittee shall maintain monthly records of the ampere-hours used by the tanks.
- B. The permittee shall maintain a daily log of visual observations of the opacity of emissions. On days a controlled process associated with a stack does not operate, "did not operate" shall be entered in the log.
- C. The permittee shall maintain records of any corrective actions taken as a result of the presence of visible emissions being detected during an observation.
- D. The permittee shall maintain records of the results of any Method 9 readings performed.
- E. The permittee shall maintain a log of daily scrubber pressure differential readings. On days a scrubber does not operate, "did not operate" shall be entered in the log.
- F. The permittee shall maintain a log of daily scrubber liquid flow rate readings. On days a scrubber does not operate, "did not operate" shall be entered in the log.
- G. The permittee shall maintain records of manufacturer recommended operating parameters for the nickel plating tanks and scrubber.
- H. The permittee shall maintain records of calibrations of scrubber pressure differential and liquid flow rate measuring instruments and devices.

### **6. Specific Reporting Requirements:**

The semiannual monitoring reports required by this permit (see SECTION F(5)) shall be required to contain only records of the following:

- A. Monthly records of the ampere hours used by the tanks.
- B. Records of visible emissions from the stack(s) during the reporting period, including date and time.

### **7. Specific Control Equipment Operating Conditions:**

- A. The scrubber shall be in place and operating efficiently while the nickel plating line is in operation.
- B. The permittee shall calibrate, maintain and operate instruments and devices used to monitor the scrubber pressure differential and liquid flow rate using procedures that take into account manufacturer's recommendations no less than quarterly.

### **8. Alternate Operating Scenarios:**

N/A



## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 8 (SE5)** Nitric Strip Tanks 302 and 303  
Control equipment: Nitric Wet Scrubber #5 for control of HNO<sub>3</sub>  
Construction commenced: December 1996

### **APPLICABLE REGULATIONS:**

401 KAR 59:010, New process operations, is applicable to each affected facility or source, associated with process operations, which are not subject to another emission standard with respect to particulate matter emissions commenced after July 2, 1975.

1. **Operating Limitations:** The usage rate of raw materials used in all affected facilities shall be limited so that the emission limitations set forth in item 2, below, are not exceeded.
2. **Emission Limitations:**
  - A. 401 KAR 59:010 § 3(1) Opacity Standard: The opacity of continuous emissions from a control device or stack shall be less than twenty (20) percent opacity.
  - B. 401 KAR 59:010 § 3(2) Mass Standard: Particulate matter emissions from a control device or stack shall not exceed 2.34 pounds per hour.

#### **Compliance Demonstration Method for Emission Limitation A:**

Compliance with the opacity standards shall be determined by the permittee performing a qualitative visual observation of the opacity of emissions at the stack no less than weekly and maintaining a log of the observations. If visible emissions from the stack are seen (not including condensed water in the plume), then an inspection of control equipment shall be initiated and corrective action taken. If visible emissions are present after the corrective action, the process shall be shut down and shall not operate again until repairs have been made that result in no visible emissions from the process during operation. In lieu of shutting the process down, the permittee may determine the opacity using Reference Method 9. If the opacity limit is not exceeded, the process may continue to operate.

#### **Compliance Demonstration Method for Emission Limitations B:**

Compliance with the mass standards will be assumed unless testing is required, when the units are in compliance with the opacity standards.

3. **Testing Requirements:**
  - A. If the Division requires it, permittee shall perform a Reference Method 5 test, or other methods approved by the Division, to determine the emission rate of particulate matter. [401 KAR 59:010, § 4(1) Test Methods and Procedures]
  - B. If the Division requires it, the permittee shall perform a Reference Method 9 test to determine the opacity of continuous emissions.  
[401 KAR 59:010, § 4 (5) Test Methods and Procedures]

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**4. Specific Monitoring Requirements:**

- A. The permittee shall monitor monthly and annual surface treatment solution consumed in the tanks.
- B. The permittee shall monitor the opacity of emissions from each stack daily as described in Compliance Demonstration Method A of Emission Limitation A.
- C. The permittee shall monitor the pressure differential in inches water column measured across the inlet and outlet ducts of the scrubber using a pressure differential measuring instrument daily.
- D. The permittee shall monitor the scrubber liquid flow rate in gallons per minute or cubic feet per minute measured at the scrubbers' liquid inlet using a liquid flow meter or other device for liquid flow daily.

**5. Specific Record Keeping Requirements:**

- A. The permittee shall maintain monthly records of the surface treatment solution used by the tanks.
- B. The permittee shall maintain a daily log of visual observations of the opacity of emissions. On days a controlled process associated with a stack does not operate, "did not operate" shall be entered in the log.
- C. The permittee shall maintain records of any corrective actions taken as a result of the presence of visible emissions being detected during an observation.
- D. The permittee shall maintain records of the results of any Method 9 readings performed.
- E. The permittee shall maintain a log of daily scrubber pressure differential readings. On days a scrubber does not operate, "did not operate" shall be entered in the log.
- F. The permittee shall maintain a log of daily scrubber liquid flow rate readings. On days a scrubber does not operate, "did not operate" shall be entered in the log.
- G. The permittee shall maintain records of manufacturer recommended operating parameters for the nickel plating tanks and scrubber.
- H. The permittee shall maintain records of calibrations of scrubber pressure differential and liquid flow rate measuring instruments and devices.

**6. Specific Reporting Requirements:**

The semiannual monitoring reports required by this permit (see SECTION F(5)) shall be required to contain only records of the following:

- A. Monthly records of the make-up solution used by the tanks.
- B. Records of visible emissions from the stack(s) during the reporting period, including date and time.

**7. Specific Control Equipment Operating Conditions:**

- A. The scrubber shall be in place and operating efficiently while the nitric strip line is in operation.
- B. The permittee shall calibrate, maintain and operate instruments and devices used to monitor the scrubber pressure differential and liquid flow rate using procedures that take into account manufacturer's recommendations no less than quarterly.

**8. Alternate Operating Scenarios: N/A**

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 10(B1)**      Cleaver Brooks FLX 700-800-160-HW  
                 natural gas-fired steam boiler #1  
                 8 mmBTU/hr maximum heat input  
                 Indirect heat exchanger  
                 Construction commenced December 1996
- 11 (B2)**      Cleaver Brooks FLX 700-800-160-HW  
                 natural gas-fired steam boiler #2  
                 8 mmBTU/hr maximum heat input  
                 Indirect heat exchanger  
                 Construction commenced December 1996
- 13 (B3)**      Cleaver Brooks FLX 700-800-160-HW  
                 natural gas-fired steam boiler #3  
                 8 mmBTU/hr maximum heat input  
                 Indirect heat exchanger  
                 Construction commenced December 1996
- 17 (B6)**      Kewaunee natural gas-fired steam boiler #6  
                 Indirect Heat Exchanger  
                 1.7 mmBTU/hr maximum heat input  
                 Construction commenced June 1996

**APPLICABLE REGULATIONS:**

401 KAR 59:015, New Indirect Heat Exchangers. The provisions of this regulation apply to each affected facility commenced on or after April 9, 1972 (affected facilities with a heat input capacity of 250 MM Btu/hr or less, with respect to particulate and sulfur dioxide emissions).

**1.      Operating Limitations:**

The affected facilities shall be operated so as not to exceed the emission limitations in Section B.2.

**2.      Emission Limitations:**

- 1) Pursuant to 401 KAR 59:015 § 4(2), emissions from each unit shall not exceed 20 % opacity.
- 2) Particulate emissions shall not exceed 0.448 lb/mmBTU for each boiler in accordance with 401 KAR 59:015 § 4(1)(c).
- 3) Sulfur dioxide emissions shall not exceed 2.04 lb/mmBTU for each boiler in accordance with 401 KAR 59:015 § 5(1)(c).

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**2. Emission Limitations (Continued):**

**Compliance Demonstration Method:**

The unit is considered to be in compliance with the particulate, sulfur dioxide and opacity standards when burning pipeline quality natural gas.

**3. Testing Requirements:**

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

**4. Specific Monitoring Requirements:**

The permittee shall monitor the volume of natural gas burned.

**5. Specific Record Keeping Requirements:**

See Section D.4.

**6. Specific Reporting Requirements: None**

**7. Specific Control Equipment Operating Conditions: None**

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 12 (SR1A)** Resist Line, consisting of:
- (1) resist spray booth – 1 robotic applicator with manual touchup
  - (1) resist topcoat spray booth – 1 robotic applicator with manual touchup
  - (2) 1.2 MMBTU/HR natural gas-fired curing ovens
- Clean-up solution  
Construction Date: June, 1999  
Control Equipment: Permanent Total Enclosure (PTE) vented to four (4) Regenerative Thermal Oxidizers (RTO) for control of volatile organic compound (VOC) emissions; Water wash system for control of particulate matter emissions

### **APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality is applicable to a major stationary source or a major modification which;

- (1) Commenced construction after September 22, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act); and
- (3) Is constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

401 KAR 59:010, New process operations, is applicable to each affected facility or source, associated with process operations, which are not subject to another emission standard with respect to particulate matter emissions commenced after July 2, 1975.

40 CFR 63, Subpart PPPP, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Products is applicable within the term of this permit. Refer to GROUP REQUIREMENTS for applicability details.

40 CFR 64, Compliance Assurance Monitoring, applicable to a pollutant-specific emissions unit at a major source that is subject to an emission limitation for the regulated air pollutant. The unit uses a control device to achieve compliance with the emission limitation and the unit has potential pre-control emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

### **1. Operating Limitations:**

The usage rate of materials used in all affected facilities shall be limited so as to not exceed the emission limitations in Section B2.

Good operating practices to minimize the use of VOC-containing materials shall be used as appropriate. Additionally, all purging activities shall be performed into a container so as to optimize work practice standards and minimize VOC emissions.

Refer to GROUP REQUIREMENTS for Subpart PPPP operating limitations.

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**2. Emission Limitations:**

**401 KAR 59:010: §3** The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity.

**Compliance Demonstration Method:**

- A) See Monitoring Requirements, B.4
- B) See Periodic Monitoring Requirements table.

**401 KAR 59:010: §3** Particulate emissions shall not equal or exceed 2.34 lb/hr.

**Compliance Demonstration Method:**

The total process weight, "P" as defined above must reflect a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period. This period shall not exceed 24 hours. Continuous compliance shall be assured by adhering to the monitoring and record keeping requirements in the periodic monitoring requirements table.

**401 KAR 51:017**

The permittee shall demonstrate 85% overall control of VOC emissions for the line to comply with BACT requirements.

**Compliance Demonstration Method:**

Compliance shall be demonstrated through performance tests, monitoring of control equipment parameters and record keeping. See Compliance Plan, Section D.

Refer to GROUP REQUIREMENTS for Subpart PPPP emission limitations.

**3. Testing Requirements:**

The permittee shall perform stack testing according to the standards and schedule specified in the Periodic Monitoring Requirements table. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

Refer to GROUP REQUIREMENTS for Subpart PPPP testing requirements.

**4. Specific Monitoring Requirements:**

The permittee shall conform to the monitoring requirements prescribed in the periodic monitoring requirements table. The permittee shall monitor raw material usages as necessary to demonstrate compliance with all requirements of this permit.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****4. Specific Monitoring Requirements (Continued):**

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack(s) when the emission unit is in operation on a weekly basis and maintain a log of the observations. A Method 9 reading by a certified visible emissions observer shall also be performed once a calendar quarter, simultaneous with the qualitative observation, to quantify the visible emissions. If four consecutive quarters indicate opacity emissions less than 20%, subsequent testing shall be conducted on a 12-month basis. In addition, if, during the daily qualitative observation, visible emissions from the stack (s) are seen (not including condensed water vapor within the plume), then the opacity shall be determined by a Method 9 reading. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs. Subsequently, the requirement to perform quarterly Method 9 readings will be reinstated.

The permittee shall install, calibrate, maintain, and operate monitoring devices which indicate the operating temperatures of the thermal oxidizers. The monitoring devices shall have an accuracy of the greater of +/- 1.0 percent of the temperature being measured expressed in degrees Fahrenheit or +/- 5.0°F. The monitoring devices shall be connected to a device(s) that records the temperature via a strip chart, electronic media, or other means.

The permittee shall install, calibrate, maintain, and continuously operate a device to monitor pressure drop within the PTE at the location established during the Method 204 compliance test that demonstrated a pressure drop across the enclosure of at least 0.007 inches H<sub>2</sub>O and a capture efficiency of 100%. The monitoring device shall be connected to a device(s) that records the pressure drop via a strip chart, electronic media, or other means.

Refer to GROUP REQUIREMENTS for Subpart PPPP monitoring requirements.

**5. Specific Record Keeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in the Periodic Monitoring Requirements table.

In addition, for all required emissions control equipment, the permittee shall keep the following records:

- a. Design and/or manufacturer's specifications.
- b. Preventive maintenance records related to performance of control equipment.
- c. All periods, during normal operating conditions, where parameters listed in the periodic monitoring requirements table are "out of standard". For thermal oxidizers, "out of standard" is defined as a confirmed three-hour period during which the average of the monitored values fails to meet the specified temperature requirements when the process has been in operation the entire three-hour period.
- d. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is not operating
- e. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is bypassed.
- f. Description of operating, temperature-measuring devices (e.g., automatic strip charts, digital data acquisition systems).

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **5. Specific Record Keeping Requirements (Continued):**

- g. Data from the temperature-measuring devices (as prescribed by the periodic monitoring requirements table) and any temporary data logged manually as back up.
- h. Inspection reports and maintenance performed in response to recommendations in inspection reports.
- i. Monitoring system malfunctions.
- j. Corrective actions taken in response to “out of standard” conditions as specified in the periodic monitoring requirements table.
- k. Calibration records for monitoring equipment specified in the periodic monitoring requirements table.

#### **Thermal Oxidizer Specific Record Keeping Requirements:**

The permittee shall maintain records of the following information for the thermal oxidizer: All 3-hour periods (during coating operations) during which the average combustion chamber temperature of the thermal oxidizer is below the average combustion chamber temperature of the thermal oxidizer determined during the most recent performance test which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements. See Section F.6.

The permittee shall keep calendar month records of usage of all applicable raw materials. Following the end of each month, Volatile Organic Compound (VOC) emissions shall be calculated on a twelve month rolling total and recorded. These records shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality.

The permittee shall keep monthly records of fuel used and report startups, shutdowns, or malfunctions.

The permittee shall keep records documenting the results of each opacity reading by EPA Reference Method 9.

The permittee shall keep records documenting the results of any required inspection and repair, as a result of a recorded opacity over 20%.

The permittee shall retain each record required by this permit for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be kept onsite for a minimum of 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records may be kept offsite for the remaining 3 years.

Refer to GROUP REQUIREMENTS for Subpart PPPP record keeping requirements.



## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**6. Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring and recordkeeping information listed in Sections B.4 and B.5 of this permit. (See Section F.6 for specific reporting dates.) The report shall list any “out of standard” conditions for periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no “out of standard” conditions occurred, the permittee shall submit a negative report.

Refer to GROUP REQUIREMENTS for Subpart PPPP reporting requirements.

**7. Specific Control Equipment Operating Conditions:**

**Specific Operating Limitations for Thermal Oxidizers:**

A. The average combustion chamber temperature in any 3-hour period shall not fall below the combustion temperature limit established during the most recent performance test, which demonstrated compliance.

B. The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature. This average combustion temperature is the minimum set point and operating limit for the thermal oxidizer.

**Compliance Demonstration Method:**

The permittee must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs. The combustion temperature shall be monitored during operation. Compliance shall be demonstrated by monitoring and recording the combustion temperature as required by the periodic monitoring requirements table, averaged over 3 hours.

**Specific Operating Limitations for Permanent Total Enclosures:**

A. The direction of air flow at all times must be into the enclosure.

B. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or

C. The pressure drop across the enclosure must be at least 0.007 inch H<sub>2</sub>O, as established in Method 204 of appendix M to 40 CFR part 51.

**Compliance Demonstration Method:**

Compliance shall be demonstrated by monitoring and recording the pressure drop as required by the periodic monitoring requirements table to ensure that it meets the minimum pressure differential requirement across the enclosure of –0.007 inches of water and the direction of air flow is into the enclosure.

Refer to GROUP REQUIREMENTS for Subpart PPPP specific control equipment operating limitations.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### PERIODIC MONITORING REQUIREMENTS

Emission Unit	Operation	Equipment Monitored	Characteristic Monitored	Parameter Monitored	Method or Device	Monitoring Frequency	Recording Frequency	Calibration Frequency	Standard Range
12 (SR1A)	Resist Line	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Continuous	15-Minute Averages & Intermittent Problem Log	Quarterly	Not below the temperature established during the last Compliance Test, 3 Hour Avg.
12 (SR1A)	Resist Line	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Continuous	15-Minute Averages	Quarterly	Setpoint = Average Temperature established during performance test
12 (SR1A)	Resist Line	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years	Every 5 Years	Each Test	See Section B.2, Compliance Demonstration Method
12 (SR1A)	Resist Line	Low Gloss PTE near Resist Paint Booth	Capture Efficiency (%)	Pressure Differential (in. H <sub>2</sub> O) across enclosure	Pressure Differential Monitor (in. H <sub>2</sub> O)	Continuous	15-Minute Averages	Quarterly	Minimum pressure differential of -0.007 inches of H <sub>2</sub> O
12 (SR1A)	Resist Line	RTO / PTE	All VOC routed to RTO	By-Pass Damper Position	Alarm	Continuous	Intermittent (Problem Log)	Monthly Confirmation	No Faults
12 (SR1A)	Resist Line	Water wash system	PM Removal Efficiency (%)	Water Gaps	Visual	Daily	Daily	N/A	No Significant Gaps
12 (SR1A)	Resist Line	Spray Booth Exhaust	Emission Rate	Particulate Emission	Stack Test (EPA Method 5) or Engineering Evaluation	Every 5 years	Every 5 years	Each Test	See Section B.2
12 (SR1A)	Resist Line	Water wash system	Opacity	Visible emissions	Qualitative visual observation or Method 9 Test	Weekly	Weekly	N/A	See Section B.4

## **SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**14 (SK5A)**                    **High Gloss East (High Bake)** consisting of:  
Dry-Off Oven (1.6 MMBTU/HR)  
Cooling Exhaust  
One (1) Primer Booth – 2 robotic applicators with manual touchup  
One (1) Basecoat Booth – 4 robotic applicators with manual touchup  
One (1) Clearcoat Booth – 4 robotic applicators with manual touchup  
Cure Oven (4.8 MMBTU/HR)  
Construction Date: June, 1999  
Control Equipment: Permanent Total Enclosure (PTE) vented to four (4) Regenerative Thermal Oxidizers (RTO) for control of volatile organic compound (VOC) emissions; Down-draft water wash system for control of particulate matter emissions  
PM Control Equipment: Down-draft water wash (spray) system in series with one (1) inch polyester pre-filter followed by main filter, a 24" X 24" X 22" deep eight pocket synthetic bag system.

### **APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality is applicable to a major stationary source or a major modification which;

- (1) Commenced construction after September 22, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act); and
- (3) Is constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

401 KAR 59:010, New process operations, is applicable to each affected facility or source, associated with process operations, which are not subject to another emission standard with respect to particulate matter emissions commenced after July 2, 1975.

40 CFR 63, Subpart PPPP, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Products is applicable within the term of this permit. Refer to GROUP REQUIREMENTS for applicability details.

40 CFR 64, Compliance Assurance Monitoring, applicable to a pollutant-specific emissions unit at a major source that is subject to an emission limitation for the regulated air pollutant. The unit uses a control device to achieve compliance with the emission limitation and the unit has potential pre-control emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

## **SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**1. Operating Limitations:**

The usage rate of materials used in all affected facilities shall be limited so as to not exceed the emission limitations in Section B2.

Good operating practices to minimize the use of VOC-containing materials shall be used as appropriate. Additionally, all purging activities shall be performed into a container so as to optimize work practice standards and minimize VOC emissions.

Refer to GROUP REQUIREMENTS for Subpart PPPP operating limitations.

**2. Emission Limitations:**

**401 KAR 59:010: §3** The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity.

**Compliance Demonstration Method:**

A) See Monitoring Requirements, B.4

B) See Periodic Monitoring Requirements table.

**401 KAR 59:010: §3** Particulate emissions shall not equal or exceed 2.34 lb/hr.

**Compliance Demonstration Method:**

The total process weight, "P" as defined above must reflect a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period. This period shall not exceed 24 hours. Continuous compliance shall be assured by adhering to the monitoring and record keeping requirements in the periodic monitoring requirements table.

**401 KAR 51:017**

The permittee shall demonstrate 85% overall control of VOC emissions for the line to comply with BACT requirements.

**Compliance Demonstration Method:**

Compliance shall be demonstrated through performance tests, monitoring of control equipment parameters and record keeping. See Compliance Plan, Section D.

Refer to GROUP REQUIREMENTS for Subpart PPPP emission limitations.

**3. Testing Requirements:**

The permittee shall perform stack testing according to the standards and schedule specified in the Periodic Monitoring Requirements table. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

Refer to GROUP REQUIREMENTS for Subpart PPPP testing requirements.

**SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****4. Specific Monitoring Requirements:**

The permittee shall conform to the monitoring requirements prescribed in the periodic monitoring requirements table. The permittee shall monitor raw material usages as necessary to demonstrate compliance with all requirements of this permit.

The permittee shall perform a qualitative visual observation of the opacity of emissions from the stack(s) when the emission unit is in operation on a weekly basis and maintain a log of the observations. A Method 9 reading by a certified visible emissions observer shall also be performed once a calendar quarter, simultaneous with the qualitative observation, to quantify the visible emissions. If four consecutive quarters indicate opacity emissions less than 20%, subsequent testing shall be conducted on a 12-month basis. In addition, if, during the daily qualitative observation, visible emissions from the stack (s) are seen (not including condensed water vapor within the plume), then the opacity shall be determined by a Method 9 reading. If emissions are in excess of the applicable opacity limit, then an inspection shall be initiated of control equipment for all necessary repairs. Subsequently, the requirement to perform quarterly Method 9 readings will be reinstated.

The permittee shall install, calibrate, maintain, and operate monitoring devices which indicate the operating temperatures of the thermal oxidizers. The monitoring devices shall have an accuracy of the greater of +/- 1.0 percent of the temperature being measured expressed in degrees Fahrenheit or +/- 5.0°F. The monitoring devices shall be connected to a device(s) that records the temperature via a strip chart, electronic media, or other means.

The permittee shall install, calibrate, maintain, and continuously operate devices to monitor velocity within the PTE at locations established during the Method 204 compliance test that demonstrated natural draft opening facial velocities of at least 200 feet per minute and a capture efficiency of 100%. The monitoring devices shall be connected to a device(s) that records the velocity via a strip chart, electronic media, or other means.

Refer to GROUP REQUIREMENTS for Subpart PPPP monitoring requirements.

**5. Specific Record Keeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in the Periodic Monitoring Requirements table.

In addition, for all required emissions control equipment, the permittee shall keep the following records:

- a. Design and/or manufacturer's specifications.
- b. Preventive maintenance records related to performance of control equipment.
- c. All periods, during normal operating conditions, where parameters listed in the periodic monitoring requirements table are "out of standard". For thermal oxidizers, "out of standard" is defined as a confirmed three-hour period during which the average of the monitored values fails to meet the specified temperature requirements, when the process has been in operation the entire three-hour period.
- d. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is not operating.

## **SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **5. Specific Record Keeping Requirements (Continued):**

- e. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is bypassed.
- f. Description of operating, temperature-measuring devices (e.g., automatic strip charts, digital data acquisition systems).
- g. Data from the temperature-measuring devices (as prescribed by the periodic monitoring requirements table) and any temporary data logged manually as back up.
- h. Inspection reports and maintenance performed in response to recommendations in inspection reports.
- i. Monitoring system malfunctions.
- j. Corrective actions taken in response to “out of standard” conditions as specified in the periodic monitoring requirements table.
- k. Calibration records for monitoring equipment specified in the periodic monitoring requirements table.

### **Thermal Oxidizer Specific Record Keeping Requirements:**

The permittee shall maintain records of the following information for the thermal oxidizer: All 3-hour periods (during coating operations) during which the average combustion chamber temperature of the thermal oxidizer is below the average combustion chamber temperature of the thermal oxidizer determined during the most recent performance test which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements. See Section F.6.

The permittee shall keep calendar month records of usage of all applicable raw materials. Following the end of each month, Volatile Organic Compound (VOC) emissions shall be calculated on a twelve month rolling total and recorded. These records shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality.

The permittee shall keep monthly records of fuel used and report startups, shutdowns, or malfunctions.

The permittee shall retain each record required by this permit for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be kept onsite for a minimum of 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records may be kept offsite for the remaining 3 years.

Refer to GROUP REQUIREMENTS for Subpart PPPP record keeping requirements.

**SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****6. Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring and recordkeeping information listed in Sections B.4 and B.5 of this permit. (See Section F.6 for specific reporting dates.) The report shall list any “out of standard” conditions for periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no “out of standard” conditions occurred, the permittee shall submit a negative report.

Refer to GROUP REQUIREMENTS for Subpart PPPP reporting requirements.

**7. Specific Control Equipment Operating Conditions:****Specific Operating Limitations for Thermal Oxidizers:**

- A. The average combustion chamber temperature in any 3-hour period shall not fall below the combustion temperature limit established during the most recent performance test, which demonstrated compliance.
- B. The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature. This average combustion temperature is the minimum set point and operating limit for the thermal oxidizer.

**Compliance Demonstration Method:**

The permittee must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs. The combustion temperature shall be monitored during operation. Compliance shall be demonstrated by monitoring and recording the combustion temperature as required by the periodic monitoring requirements table, averaged over 3 hours.

**Specific Operating Limitations for Permanent Total Enclosures:**

- A. The direction of air flow at all times must be into the enclosure.
- B. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or
- C. The pressure drop across the enclosure must be at least 0.007 inch H<sub>2</sub>O, as established in Method 204 of appendix M to 40 CFR part 51.

**Compliance Demonstration Method:**

Compliance shall be demonstrated by monitoring and recording the supply air ducts entrance and exit velocities and the vestibule exhaust velocity as required by the periodic monitoring requirements table. By fulfilling these requirements it will be ensured that the minimum velocities necessary to maintain the 200 fpm facial velocity for the NDOs and the minimum pressure drop limit of -0.007 inches of water across the enclosure as measured during the most recent Method 204 test are met. Fulfilling these requirements will also ensure that the direction of air flow is into the enclosure.

See Compliance Plan, Section D.

Refer to GROUP REQUIREMENTS for Subpart PPPP specific control equipment operating conditions.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### PERIODIC MONITORING REQUIREMENTS

Emission Unit	Operation	Equipment Monitored	Characteristic Monitored	Parameter Monitored	Method or Device	Monitoring Frequency	Recording Frequency	Calibration Frequency	Standard Range
14 (SK5A)	High Bake	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Continuous	15-Minute Averages & Intermittent Problem Log	Quarterly	Not below the temperature established during the last Compliance Test, 3 Hour Avg.
14 (SK5A)	High Bake	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Continuous	15-Minute Averages	Quarterly	Setpoint = Average Temperature established during performance test
14 (SK5A)	High Bake	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years	Every 5 Years	Each Test	See Section B.2, Compliance Demonstration Method
14 (SK5A)	High Bake	PTE entrance supply air	Capture Efficiency (%)	Supply Air Duct Velocity (feet/minute)	Velocity Monitor	Continuous	15-Minute Averages	Quarterly	See Compliance Plan, Section D.
14 (SK5A)	High Bake	PTE exit supply air	Capture Efficiency (%)	Supply Air Duct Velocity (feet/minute)	Velocity Monitor	Continuous	15-Minute Averages	Quarterly	See Compliance Plan, Section D.
14 (SK5A)	High Bake	Vestibule exhaust duct	Capture Efficiency (%)	Vestibule Exhaust Duct Velocity (feet/minute)	Velocity Monitor	Continuous	15-Minute Averages	Quarterly	See Compliance Plan, Section D.
14 (SK5A)	High Bake	RTO / PTE	All VOC routed to RTO	Bypass Damper position	Alarm	Continuous	Intermittent (Problem Log)	Monthly Confirmation	No Faults



## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### PERIODIC MONITORING REQUIREMENTS

Emission Unit	Operation	Equipment Monitored	Characteristic Monitored	Parameter Monitored	Method or Device	Monitoring Frequency	Recording Frequency	Calibration Frequency	Standard Range
14 (SK5A)	High Bake	Down-draft water wash system	PM Removal Efficiency (%)	Water Gaps	Visual	Daily	Daily	N/A	No Significant Gaps
14 (SK5A)	High Bake	Primer Booth, Basecoat Booth and Clearcoat Booth exhaust	Emission Rate	Particulate Emission	Stack Test (EPA Method 5 or Engineering Evaluation)	Every 5 years	Every 5 years	Each Test	See Section B.2
14 (SK5A)	High Bake	Down-draft water wash system	Opacity	Visible emissions	Qualitative visual observation or Method 9 Test	Weekly	Weekly	N/A	See Section B.4
14 (SK5A)	High Bake	Filters in three (3) air houses for prime, base and clear operations	PM Removal Efficiency (%)	Pressure Drop	Magnehelic gauge	Daily	Daily	Annual	No more than 2.0 inches of water

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**15(B4)** Cleaver Brooks FLX 700-800-160-HW  
natural gas-fired steam boiler #4  
8 mmBTU/hr maximum heat input  
Indirect heat exchanger  
Construction commenced June 1999

**16 (B5)** Cleaver Brooks FLX 700-800-160-HW  
natural gas-fired steam boiler #5  
8 mmBTU/hr maximum heat input  
Indirect heat exchanger  
Construction commenced June 1999

**APPLICABLE REGULATIONS:**

401 KAR 59:015, New Indirect Heat Exchangers. The provisions of this regulation apply to each affected facility commenced on or after April 9, 1972 (affected facilities with a heat input capacity of 250 MM Btu/hr or less, with respect to particulate and sulfur dioxide emissions).

**1. Operating Limitations:**

The affected facilities shall be operated so as not to exceed the emission limitations in Section B.2.

**2. Emission Limitations:**

- A) Pursuant to 401 KAR 59:015 § 4(2), emissions from each unit shall not exceed 20 % opacity.
- B) Particulate emissions shall not exceed 0.400 lb/mmBTU for each boiler in accordance with 401 KAR 59:015 § 4(1)(c).
- C) Sulfur dioxide emissions shall not exceed 1.67 lb/mmBTU for each boiler in accordance with 401 KAR 59:015 § 5(1)(c).

**Compliance Demonstration Method:**

The unit is considered to be in compliance with the particulate, sulfur dioxide and opacity standards while burning pipeline quality natural gas.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**3. Testing Requirements:**

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

**4. Specific Monitoring Requirements:**

The permittee shall monitor the volume of natural gas burned.

**5. Specific Record Keeping Requirements:**

See Section D.4.

**6. Specific Reporting Requirements: None**

**7. Specific Control Equipment Operating Conditions: None**

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 18                      Paint Mix Room East servicing High Gloss East (High Bake) including cleanup activities  
                            Construction Date: June, 1999  
                            Control Equipment: Exhaust vented to four (4) Regenerative Thermal Oxidizers (RTO) for control of volatile organic compound (VOC) emissions

### **APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality is applicable to a major stationary source or a major modification which;

- (1) Commenced construction after September 22, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act); and
- (3) Is constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

40 CFR 63, Subpart PPPP, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Products is applicable within the term of this permit. Refer to GROUP REQUIREMENTS for Subpart PPPP applicability details.

1.     **Operating Limitations:**

Refer to GROUP REQUIREMENTS for Subpart PPPP operating limitations.

2.     **Emission Limitations:**

**401 KAR 51:017**

The permittee shall demonstrate 85% overall control of VOC emissions for the line to comply with BACT requirements.

**Compliance Demonstration Method:**

Compliance shall be demonstrated through performance tests, monitoring of control equipment parameters and record keeping. See Section D.

Refer to GROUP REQUIREMENTS for Subpart PPPP emission limitations.

3.     **Testing Requirements:**

The permittee shall perform stack testing according to the standards and schedule specified in the Periodic Monitoring Requirements table. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

Refer to GROUP REQUIREMENTS for Subpart PPPP testing requirements.

4.     **Specific Monitoring Requirements:**

The permittee shall conform to the monitoring requirements prescribed in the periodic monitoring requirements table.

## **SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **5. Specific Record Keeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in the Periodic Monitoring Requirements table.

In addition, for all required emissions control equipment, the permittee shall keep the following records:

- a. Design and/or manufacturer's specifications.
- b. Preventive maintenance records related to performance of control equipment.
- c. All periods, during normal operating conditions, where parameters listed in the periodic monitoring requirements table are "out of standard". For thermal oxidizers, "out of standard" is defined as a confirmed three-hour period during which the average of the monitored values fails to meet the specified temperature requirements, when the process has been in operation the entire three-hour period.
- d. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is not operating
- e. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is bypassed.
- f. Description of operating, temperature-measuring devices (e.g., automatic strip charts, digital data acquisition systems).
- g. Data from the temperature-measuring devices (as prescribed by the periodic monitoring requirements table) and any temporary data logged manually as back up.
- h. Inspection reports and maintenance performed in response to recommendations in inspection reports.
- i. Monitoring system malfunctions.
- j. Corrective actions taken in response to "out of standard" conditions as specified in the periodic monitoring requirements table.
- k. Calibration records for monitoring equipment specified in the periodic monitoring requirements table.

### **Thermal Oxidizer Specific Record Keeping Requirements:**

The permittee shall maintain records of the following information for the thermal oxidizer: All 3-hour periods (during coating operations) during which the average combustion chamber temperature of the thermal oxidizer is below the average combustion chamber temperature of the thermal oxidizer determined during the most recent performance test which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements. See Section F.6.

## **SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**5. Specific Record Keeping Requirements (Continued):**

The permittee shall keep monthly records of fuel used and report startups, shutdowns, or malfunctions.

The permittee shall retain each record required by this permit for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be kept onsite for a minimum of 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records may be kept offsite for the remaining 3 years.

Refer to GROUP REQUIREMENTS for Subpart PPPP record keeping requirements.

**6. Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring and recordkeeping information listed in Sections B.4 and B.5 of this permit. (See Section F.6 for specific reporting dates.) The report shall list any “out of standard” conditions for periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no “out of standard” conditions occurred, the permittee shall submit a negative report.

Refer to GROUP REQUIREMENTS for Subpart PPPP reporting requirements.

**7. Specific Control Equipment Operating Conditions:**

**Specific Operating Limitations for Thermal Oxidizers:**

- A. The average combustion chamber temperature in any 3-hour period shall not fall below the combustion temperature limit established during the most recent performance test, which demonstrated compliance.
- B. The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature. This average combustion temperature is the minimum set point and operating limit for the thermal oxidizer.

**Compliance Demonstration Method:**

The permittee must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs. The combustion temperature shall be monitored during operation. Compliance shall be demonstrated by monitoring and recording the combustion temperature as required by the periodic monitoring requirements table, averaged over 3 hours.

Refer to GROUP REQUIREMENTS for Subpart PPPP specific control equipment operating conditions.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### PERIODIC MONITORING REQUIREMENTS

Emission Unit	Operation	Equipment Monitored	Characteristic Monitored	Parameter Monitored	Method or Device	Monitoring Frequency	Recording Frequency	Calibration Frequency	Standard Range
18	Paint Mix Room East	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Continuous	15 Minute Averages & Intermittent Problem Log	Quarterly	Not below the temperature established during the last Compliance Test, 3 Hour Avg.
18	Paint Mix Room East	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Continuous	15 Minute Averages	Quarterly	Setpoint = Average Temperature established during performance test
18	Paint Mix Room East	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years	Every 5 Years	Each Test	See Section B.2, Compliance Demonstration Method
18	Paint Mix Room East	Paint Mix Room Exhausts	PTE Collection	Bypass Damper position	Alarm	Continuous	Intermittent (Problem Log)	Monthly Confirmation	See Compliance Plan, Section D.
18	Paint Mix Room East	Paint Mix Room Exhausts	Emission Rate	VOC emitted	EPA Method 25 test	Every 5 Years	Every 5 Years	Each Test	See Section B.2, Compliance Demonstration Method

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- 19                      Paint Mix Room West servicing High Gloss West including cleanup activities  
                         Construction Date: June, 1999  
                         Control Equipment: Exhaust vented to four (4) Regenerative Thermal  
                         Oxidizers (RTO) for control of volatile organic compound (VOC) emissions

### **APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality is applicable to a major stationary source or a major modification which;

- (1) Commenced construction after September 22, 1982;
- (2) Emits a pollutant regulated by 42 USC 7401 to 7671q (Clean Air Act); and
- (3) Is constructed in an area designated as attainment or unclassifiable for a pollutant as defined pursuant to 42 USC 7407(d)(1)(A)(ii) or (iii) (Section 107(d)(1)(A)(ii) or (iii) of the Clean Air Act). Area designations are contained in 40 CFR 81.318.

40 CFR 63, Subpart PPPP, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Products is applicable within the term of this permit. Refer to GROUP REQUIREMENTS for Subpart PPPP applicability details.

1.     **Operating Limitations:**

Refer to GROUP REQUIREMENTS for Subpart PPPP operating limitations.

2.     **Emission Limitations:**

**401 KAR 51:017**

The permittee shall demonstrate 85% overall control of VOC emissions for the line to comply with BACT requirements.

**Compliance Demonstration Method:**

Compliance shall be demonstrated through performance tests, monitoring of control equipment parameters and record keeping. See Compliance Plan, Section D.

Refer to GROUP REQUIREMENTS for Subpart PPPP emission limitations.

3.     **Testing Requirements:**

The permittee shall perform stack testing according to the standards and schedule specified in the Periodic Monitoring Requirements table. Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005 § 2(2) and 50:045 § 4.

Refer to GROUP REQUIREMENTS for Subpart PPPP testing requirements.

4.     **Specific Monitoring Requirements:**

The permittee shall conform to the monitoring requirements prescribed in the periodic monitoring requirements table.

Refer to GROUP REQUIREMENTS for Subpart PPPP monitoring requirements.



## **SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **5. Specific Record Keeping Requirements:**

The permittee shall conform to the record keeping requirements, as prescribed in the Periodic Monitoring Requirements table.

In addition, for all required emissions control equipment, the permittee shall keep the following records:

- a. Design and/or manufacturer's specifications.
- b. Preventive maintenance records related to performance of control equipment.
- c. All periods, during normal operating conditions, where parameters listed in the periodic monitoring requirements table are "out of standard". For thermal oxidizers, "out of standard" is defined as a confirmed three-hour period during which the average of the monitored values fails to meet the specified temperature requirements, when the process has been in operation the entire three-hour period.
- d. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is not operating
- e. All periods, during normal operating conditions, where emissions control equipment, required by this permit, is bypassed.
- f. Description of operating, temperature-measuring devices (e.g., automatic strip charts, digital data acquisition systems).
- g. Data from the temperature-measuring devices (as prescribed by the periodic monitoring requirements table) and any temporary data logged manually as back up.
- h. Inspection reports and maintenance performed in response to recommendations in inspection reports.
- i. Monitoring system malfunctions.
- j. Corrective actions taken in response to "out of standard" conditions as specified in the periodic monitoring requirements table.
- k. Calibration records for monitoring equipment specified in the periodic monitoring requirements table.

### **Thermal Oxidizer Specific Record Keeping Requirements:**

The permittee shall maintain records of the following information for the thermal oxidizer: All 3-hour periods (during coating operations) during which the average combustion chamber temperature of the thermal oxidizer is below the average combustion chamber temperature of the thermal oxidizer determined during the most recent performance test which demonstrated compliance. Each occurrence shall be considered a deviation from permit requirements. See Section F.6.

The permittee shall keep monthly records of fuel used and report startups, shutdowns, or malfunctions.

The permittee shall retain each record required by this permit for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be kept onsite for a minimum of 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records may be kept offsite for the remaining 3 years.

Refer to GROUP REQUIREMENTS for Subpart PPPP monitoring requirements.

## **SECTION B -EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**6. Specific Reporting Requirements:**

The permittee shall submit summary monitoring reports every six (6) months containing monitoring and record keeping information listed in Sections B.4 and B.5 of this permit. (See Section F.6 for specific reporting dates.) The report shall list any “out of standard” conditions for periodic monitoring requirements, as listed in the Periodic Monitoring Requirements table below. If no “out of standard” conditions occurred, the permittee shall submit a negative report.

Refer to GROUP REQUIREMENTS for Subpart PPPP reporting requirements.

**7. Specific Control Equipment Operating Conditions:**

**Specific Operating Limitations for Thermal Oxidizers:**

- A. The average combustion chamber temperature in any 3-hour period shall not fall below the combustion temperature limit established during the most recent performance test, which demonstrated compliance.
- B. The permittee shall use the data collected during the performance test to calculate and record the average combustion temperature. This average combustion temperature is the minimum set point and operating limit for the thermal oxidizer.

**Compliance Demonstration Method:**

The permittee must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs. The combustion temperature shall be monitored during operation. Compliance shall be demonstrated by monitoring and recording the combustion temperature as required by the periodic monitoring requirements table, averaged over 3 hours.

Refer to GROUP REQUIREMENTS for Subpart PPPP specific control equipment operating conditions

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### PERIODIC MONITORING REQUIREMENTS

Emission Unit	Operation	Equipment Monitored	Characteristic Monitored	Parameter Monitored	Method or Device	Monitoring Frequency	Recording Frequency	Calibration Frequency	Standard Range
19	Paint Mix Room West	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Continuous	15 Minute Averages & Intermittent Problem Log	Quarterly	Not below the temperature established during the last compliance Test, 3 Hour Avg.
19	Paint Mix Room West	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	Oxidizer Combustion Chamber Temperature	Thermocouple	Continuous	15 Minute Averages	Quarterly	Setpoint = Average Temperature established during performance test
19	Paint Mix Room West	Four RTOs (SK5A, S9A, SL11A, SR1A)	Destruction Efficiency (%)	VOC In / Out	Stack Test (EPA Method 25A)	Every 5 Years	Every 5 Years	Each Test	See Section B.2, Compliance Demonstration Method
19	Paint Mix Room West	Paint Mix Room Exhausts	PTE Collection	Bypass Damper position	Alarm	Continuous	Intermittent (Problem Log)	Monthly Confirmation	No Faults
19	Paint Mix Room West	Paint Mix Room Exhausts	Emission Rate	VOC emitted	EPA Method 25 test	Every 5 Years	Every 5 Years	Each Test	See Section B.2, Compliance Demonstration Method

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**20 High Bake Palin Unit and Wastewater Treatment Pit – 41,000 gallons**

**High Gloss Palin Unit and Wastewater Treatment Pit – 41,000 gallons**

**APPLICABLE REGULATIONS:**

40 CFR 63, Subpart PPPP, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Products is applicable within the term of this permit. Refer to GROUP REQUIREMENTS for Subpart PPPP applicability details.

1. **Operating Limitations:**  
Refer to GROUP REQUIREMENTS for Subpart PPPP operating limitations.
2. **Emission Limitations:** Refer to GROUP REQUIREMENTS for Subpart PPPP emission limitations.
3. **Testing Requirements:** Refer to GROUP REQUIREMENTS for Subpart PPPP testing requirements.
4. **Specific Monitoring Requirements:** Refer to GROUP REQUIREMENTS for Subpart PPPP monitoring requirements.
5. **Specific Record Keeping Requirements:** Refer to GROUP REQUIREMENTS for Subpart PPPP record keeping requirements.
6. **Specific Reporting Requirements:** Refer to GROUP REQUIREMENTS for Subpart PPPP reporting requirements.
7. **Specific Control Equipment Operating Conditions:** Refer to GROUP REQUIREMENTS for Subpart PPPP specific control equipment operating conditions.

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **Group Requirements**

<b>LIST of POINTS</b>	<b>02</b>	<b>High Gloss Painting System (High Gloss West)</b>
	<b>03</b>	<b>Low Gloss Painting System</b>
	<b>12</b>	<b>Resist Line</b>
	<b>14</b>	<b>High Gloss East (High Bake)</b>
	<b>18</b>	<b>Paint Mix Room East</b>
	<b>19</b>	<b>Paint Mix Room West</b>
	<b>20</b>	<b>Wastewater Treatment and Solvent Storage</b>

### **Applicable Regulations:**

401 KAR 63:002: 40 CFR 63.4480 to 63.4581 (Subpart PPPP), “National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products”, applies to each of the four subcategories listed in § 63.4482 (b).

40 CFR 63.4482: (b) The affected source is the collection of all items listed in paragraphs (b) (1) through (4) of this section that are used for surface coating of plastic parts and products within each subcategory.

- (1) All coating operations as defined in § 63.4581;
- (2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;
- (3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and
- (4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

40 CFR 63.4501: Table 2 of Subpart PPPP shows which parts of the General Provisions in §§ 63.1 through 63.15 apply.

### **1. Operating Limitations:**

40 CFR 63.4493 (b) The permittee must develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing and conveying of coatings, thinners and/or other additives, and cleaning materials used in, and waste materials generated by the controlled coating operation(s). The plan must specify practices and procedures to ensure that, at a minimum, the elements specified in paragraphs (b) (1) through (5) of this section are implemented.

- (1) All organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be stored in closed containers.
- (2) Spills of organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be minimized.
- (3) Organic-HAP-containing coatings, thinners and/or other additives, cleaning materials must be conveyed from one location to another in closed containers or pipes.

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **1. Operating Limitations (Continued):**

- (4) Mixing vessels which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.
- (5) Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.

40 CFR 63.4500 (a) (2) (iii) The coating operation(s) must be in compliance with the work practice standards in § 63.4493 at all times.

40 CFR 63.4561 (b) *Compliance with operating limits.* Except as provided in § 63.4560 (a) (4), and except for solvent recovery systems for which the permittee conducts liquid-liquid material balances according to the requirements of paragraph (j) of this section, the permittee must establish and demonstrate continuous compliance during the initial compliance period with the operating limits required by § 63.4492, using the procedures specified in §§ 63.4567 and 63.4568.

40 CFR 63.4561 (c) *Compliance with work practice requirements.* The permittee must develop, implement, and document the implementation of the work practice plan required by § 63.4493 during the initial compliance period, as specified in § 63.4530.

### **2. Emission Limitations:**

- A. 40 CFR 63.4490 (b) (1) For each existing general use coating affected source, limit organic HAP emissions to no more than 0.16 kg (0.16 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.
- B. 40 CFR 63.4490 (b) (3) For each existing TPO coating affected source, limit organic HAP emissions to no more than 0.26 kg (0.26 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.
- C. 40 CFR 63.4490 (c) (1) If the general use or TPO surface coating operations subject to only one of the emission limits specified in paragraphs (b) (1) or (b) (3) of this section account for 90 percent or more of the surface coating activity at the facility (*i.e.*, it is the predominant activity at the facility), then compliance with that emission limitation for all surface coating operations constitutes compliance with the other applicable emission limitations.

### **Compliance Demonstration Method:**

40 CFR 63.4491 The permittee must include all coatings (as defined in § 63.4581), thinners and/or other additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in § 63.4490. To make this determination, the permittee must use at least one of the three compliance options listed in paragraphs (a) through (c) of this section. The permittee may apply any of the compliance options to an individual coating operation, or to multiple coating operations as a group, or to the entire affected source. The permittee may use different compliance options for different coating operations, or at different times on the same coating operation. The permittee may employ different compliance options when different coatings are applied to the same part, or when the same coating is applied to different parts. However, the permittee may not use different compliance options at the same time on the same coating operation.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations (Continued):****Compliance Demonstration Method (Continued):**

40 CFR 63.4491 (a) Compliant material option. – *This section is omitted.*

40 CFR 63.4491 (b) Emission rate without add-on controls option. – *This section is omitted.*

**40 CFR 63.4491 (c) Emission rate with add-on controls option.** Demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), and the emissions reductions achieved by the emission capture systems and add-on controls, the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in § 63.4490, calculated as a rolling 12-month emission rate and determined on a monthly basis. If this compliance option is used, the permittee must also demonstrate that all emission capture systems and add-on control devices for the coating operation(s) meet the operating limits required by § 63.4492, except for solvent recovery systems for which a liquid-liquid material balance is conducted according to § 63.4561 (j), and that the work practice standards required in § 63.4493 are met. The permittee must meet all the requirements of §§ 63.4560 through 63.4568 to demonstrate compliance with the emission limits, operating limits, and work practice standards using this option.

40 CFR 63.4500 (a) (2) (i) The coating operation(s) must be in compliance with the applicable emission limit in § 63.4490 at all times except during periods of startup, shutdown, and malfunction.

**Demonstrating Initial and Continuous Compliance with the Emission Limitations:**

40 CFR 63.4541 (c) Calculate the organic HAP content of each coating. Calculate the organic HAP content, kg (lb) organic HAP emitted per kg (lb) coating solids used, of each coating used during the compliance period using Equation 1 of this section:

$$H_c = \frac{W_c}{S_c} \quad (\text{Eq. 1})$$

Where:

H<sub>c</sub> = Organic HAP content of the coating, kg (lb) of organic HAP emitted per kg (lb) coating solids used.

W<sub>c</sub> = Mass fraction of organic HAP in the coating, kg organic HAP per kg coating, determined according to paragraph (a) of this section (Refer to **3. Testing Requirements**).

S<sub>c</sub> = Mass fraction of coating solids, kg coating solids per kg coating determined according to paragraph (b) of this section (Refer to **3. Testing Requirements**).

40 CFR 63.4551 (a) *Determine the mass fraction of organic HAP for each material.* Determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each month according to the requirements in § 63.4541 (a).

40 CFR 63.4551 (b) *Determine the mass fraction of coating solids.* Determine the mass fraction of coating solids (kg (lb) of coating solids per kg (lb) of coating) for each coating used during each month according to the requirements in § 63.4541 (b).

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations (Continued):****Compliance Demonstration Method (Continued):**

40 CFR 63.4551 (c) *Determine the density of each material.* Determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475-98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see § 63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-98 and other such information sources, the test results will take precedence unless, after consultation the permittee demonstrates to the agency that the formulation data are correct. If the permittee purchases materials or monitors consumption by weight instead of volume, it is not necessary to determine material density. Instead, the permittee may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 of this section.

40 CFR 63.4551 (d) *Determine the volume of each material used.* Determine the volume (liters) of each coating, thinner and/or other additive, and cleaning material used during each month by measurement or usage records. If the permittee purchases materials or monitors consumption by weight instead of volume, the permittee does not need to determine the volume of each material used. Instead, the permittee may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 of this section.

40 CFR 63.4551 (e) *Calculate the mass of organic HAP emissions.* The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. Calculate the mass of organic HAP emissions using Equation 1 of this section.

$$H_e = A + B + C - R_w \quad (\text{Eq. 1})$$

Where:

$H_e$  = Total mass of organic HAP emissions during the month, kg.

A = Total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 1A of this section.

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg, as calculated in Equation 1B of this section.

C = Total mass of organic HAP in the cleaning materials used during the month, kg, as calculated in Equation 1C of this section.

$R_w$  = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg, determined according to paragraph (e) (4) of this section. (A value of zero may assigned to  $R_w$  if this allowance is not used.)

(1) Calculate the kg organic HAP in the coatings used during the month using Equation 1A of this section:



## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 2. Emission Limitations (Continued):

#### Compliance Demonstration Method (Continued):

$$A = \sum_{i=1}^m (Vol_{c,i})(D_{c,i})(W_{c,i}) \quad (\text{Eq. 1A})$$

Where:

A = Total mass of organic HAP in the coatings used during the month, kg.

Vol<sub>c,i</sub> = Total volume of coating, i, used during the month, liters.

D<sub>c,i</sub> = Density of coating, i, kg coating per liter coating.

W<sub>c,i</sub> = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in § 63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to Subpart PPPP.

m = Number of different coatings used during the month.

(2) Calculate the kg of organic HAP in the thinners and/or other additives used during the month using Equation 1B of this section:

$$B = \sum_{j=1}^n (Vol_{t,j})(D_{t,j})(W_{t,j}) \quad (\text{Eq. 1B})$$

Where:

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg.

Vol<sub>t,j</sub> = Total volume of thinner and/or other additive, j, used during the month, liters.

D<sub>t,j</sub> = Density of thinner and/or other additive, j, kg per liter.

W<sub>t,j</sub> = Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in § 63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to Subpart PPPP.

n = Number of different thinners and/or other additives used during the month.

(3) Calculate the kg organic HAP in the cleaning materials used during the month using Equation 1C of this section:

$$C = \sum_{k=1}^p (Vol_{s,k})(D_{s,k})(W_{s,k}) \quad (\text{Eq. 1C})$$

Where:

C = Total mass of organic HAP in the cleaning materials used during the month, kg.

Vol<sub>s,k</sub> = Total volume of cleaning material, k, used during the month, liters.

D<sub>s,k</sub> = Density of cleaning material, k, kg per liter.

W<sub>s,k</sub> = Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg material.

p = Number of different cleaning materials used during the month.

(4) If the permittee chooses to account for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSDF in Equation 1 of this section, then the permittee must determine the mass according to paragraphs (e) (4) (i) through (iv) of this section.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 2. Emission Limitations (Continued):

#### Compliance Demonstration Method (Continued):

- (i) The permittee may only include waste materials in the determination that are generated by coating operations in the affected source for which the permittee uses Equation 1 of this section and that will be treated or disposed of by a facility that is regulated as a TSDF under 40 CFR part 262, 264, 265, or 266. The TSDF may be either off-site or on-site. The permittee may not include organic HAP contained in wastewater.
- (ii) The permittee must determine either the amount of the waste materials sent to a TSDF during the month or the amount collected and stored during the month and designated for future transport to a TSDF. Do not include in the determination any waste materials sent to a TSDF during a month if the permittee has already included them in the amount collected and stored during that month or a previous month.
- (iii) Determine the total mass of organic HAP contained in the waste materials specified in paragraph (e) (4) (ii) of this section.
- (iv) The permittee must document the methodology used to determine the amount of waste materials and the total mass of organic HAP they contain, as required in § 63.4530 (g). If waste manifests include this information, they may be used as part of the documentation of the amount of waste materials and mass of organic HAP contained in them.

40 CFR 63.4551 (f) *Calculate the total mass of coating solids used.* Determine the total mass of coating solids used, kg, which is the combined mass of coating solids for all the coatings used during each month, using Equation 2 of this section;

$$M_{st} = \sum_{i=1}^m (Vol_{c,i})(D_{c,i})(M_{s,i}) \quad (\text{Eq. 2})$$

Where:

$M_{st}$  = Total mass of coating solids used during the month, kg.

$Vol_{c,i}$  = Total volume of coating, i, used during the month, liters.

$D_{c,i}$  = Density of coating, i, kg per liter coating, determined according to § 63.4551 (c).

$M_{s,i}$  = Mass fraction of coating solids for coating, i, kg solids per kg coating, determined according to § 63.4541 (b).

$m$  = Number of coatings used during the month.

40 CFR 63.4561 (a) The permittee may use the emission rate with add-on controls option for any coating operation, for any group of coating operations in the affected source, or for all of the coating operations in the affected source. The permittee may include both controlled and uncontrolled coating operations in a group for which this option is used. The permittee must use either the compliant material option or the emission rate without add-on controls option for any coating operation in the affected source for which the emission rate with add-on controls option is not used. To demonstrate initial compliance, the coating operation(s) for which the permittee uses the emission rate with add-on controls option must meet the applicable emission limitations in §§ 63.4490, 63.4492, and 63.4493. The permittee must conduct a separate initial compliance demonstration for each general use, TPO, automotive lamp, and assembled on-road vehicle coating operation, unless the permittee is demonstrating compliance with a predominant activity or facility-specific emission limit as provided in § 63.4490 (c).

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations (Continued):****Compliance Demonstration Method (Continued):**

If the permittee is demonstrating compliance with a predominant activity or facility-specific emission limit as provided in § 63.4490 (c), the permittee must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. The permittee must meet all the requirements of this section. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners and/or cleaning materials used on coating operations for which the permittee uses the compliant material option or the emission rate without add-on controls option. The permittee does not need to redetermine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed onsite (or reclaimed off-site if the permittee has documentation showing that they received back the exact same materials that were sent off-site) and reused in the coating operation(s) for which the permittee used the emission rate with add-on controls option. If the permittee uses coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed.

40 CFR 63.4561 (d) *Compliance with emission limits.* The permittee must follow the procedures in paragraphs (e) through (n) of this section to demonstrate compliance with the applicable emission limit in § 63.4490 for each affected source in each subcategory.

40 CFR 63.4561 (e) *Determine the mass fraction of organic HAP, density, volume used, and mass fraction of coating solids.* Follow the procedures specified in § 63.4551 (a) through (d) to determine the mass fraction of organic HAP, density, and volume of each coating, thinner and/or other additive, and cleaning material used during each month; and the mass fraction of coating solids for each coating used during each month.

40 CFR 63.4561 (f) *Calculate the total mass of organic HAP emissions before add-on controls.* Using Equation 1 of § 63.4551, calculate the total mass of organic HAP emissions before add-on controls from all coatings, thinners and/or other additives, and cleaning materials used during each month in the coating operation or group of coating operations for which the permittee uses the emission rate with add-on controls option.

40 CFR 63.4561 (g) *Calculate the organic HAP emission reduction for each controlled coating operation.* Determine the mass of organic HAP emissions reduced for each controlled coating operation during each month. The emission reduction determination quantifies the total organic HAP emissions that pass through the emission capture system and are destroyed or removed by the add-on control device. Use the procedures in paragraph (h) of this section to calculate the mass of organic HAP emission reduction for each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which a liquid-liquid material balance is conducted. For each controlled coating operation using a solvent recovery system for which a liquid-liquid material balance is conducted, use the procedures in paragraph (j) of this section to calculate the organic HAP emission reduction.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 2. Emission Limitations (Continued):

#### Compliance Demonstration Method (Continued):

40 CFR 63.4561 (h) *Calculate the organic HAP emission reduction for each controlled coating operation not using liquid-liquid material balance.* Use Equation 1 of this section to calculate the organic HAP emission reduction for each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which a liquid-liquid material balance is conducted. The calculation applies the emission capture system efficiency and add-on control device efficiency to the mass of organic HAP contained in the coatings, thinners and/or other additives, and cleaning materials that are used in the coating operation served by the emission capture system and add-on control device during each month. The permittee must assume zero efficiency for the emission capture system and add-on control device for any period of time a deviation specified in § 63.4563 (c) or (d) occurs in the controlled coating operation, including a deviation during a period of startup, shutdown, or malfunction unless the permittee has other data indicating the actual efficiency of the emission capture system and add-on control device and the use of these data is approved by the Division. Equation 1 of this section treats the materials used during such a deviation as if they were used on an uncontrolled coating operation for the time period of the deviation.

$$H_C = (A_C + B_C + C_C - R_W - H_{UNC}) \left( \frac{CE}{100} \times \frac{DRE}{100} \right) \quad (\text{Eq. 1})$$

Where:

$H_C$  = Mass of organic HAP emission reduction for the controlled coating operation during the month, kg.

$A_C$  = Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg, as calculated in Equation 1A of this section.

$B_C$  = Total mass of organic HAP in the thinners and/or other additives used in the controlled coating operation during the month, kg, as calculated in Equation 1B of this section.

$C_C$  = Total mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg, as calculated in Equation 1C of this section.

$R_W$  = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the compliance period, kg, determined according to § 63.4951 (e) (4). (The permittee may assign a value of zero to  $R_W$  if this allowance is not used.)

$H_{UNC}$  = Total mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used during all deviations specified in §63.4563 (c) and (d) that occurred during the month in the controlled coating operation, kg, as calculated in Equation 1D of this section.

$CE$  = Capture efficiency of the emission capture system vented to the add-on control device, percent. Use the test methods and procedures specified in §§ 63.4564 and 63.4566 to measure and record capture efficiency.

$DRE$  = Organic HAP destruction or removal efficiency of the add-on control device, percent. Use the test methods and procedures in §§ 63.4564 and 63.4566 to measure and record the organic HAP destruction or removal efficiency.

(1) Calculate the mass of organic HAP in the coatings used in the controlled coating operation, kg (lb), using Equation 1A of this section:

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 2. Emission Limitations (Continued):

#### Compliance Demonstration Method (Continued):

$$A_C = \sum_{i=1}^m (Vol_{c,i})(D_{c,i})(W_{c,i}) \quad (\text{Eq. 1A})$$

Where:

$A_C$  = Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg.

$Vol_{c,i}$  = Total volume of coating, i, used during the month, liters.

$D_{c,i}$  = Density of coating, i, kg coating per liter coating.

$W_{c,i}$  = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in § 63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to Subpart PPPP.

$m$  = Number of different coatings used during the month.

(2) Calculate the mass of organic HAP in the thinners and/or other additives used in the controlled coating operation, kg (lb), using Equation 1B of this section:

$$B_C = \sum_{j=1}^n (Vol_{t,j})(D_{t,j})(W_{t,j}) \quad (\text{Eq. 1B})$$

Where:

$B_C$  = Total mass of organic HAP in the thinners and/or other additives used in the controlled coating operation during the month, kg.

$Vol_{t,j}$  = Total volume of thinner and/or other additive, j, used during the month, liters.

$D_{t,j}$  = Density of thinner and/or other additive, j, kg per liter.

$W_{t,j}$  = Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in § 63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to Subpart PPPP.

$n$  = Number of different thinners and/or other additives used during the month.

(3) Calculate the mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg (lb), using Equation 1C of this section:

$$C_C = \sum_{k=1}^p (Vol_{s,k})(D_{s,k})(W_{s,k}) \quad (\text{Eq. 1C})$$

Where:

$C_C$  = Total mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg.

$Vol_{s,k}$  = Total volume of cleaning material, k, used during the month, liters.

$D_{s,k}$  = Density of cleaning material, k, kg per liter.

$W_{s,k}$  = Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg material.

$p$  = Number of different cleaning materials used during the month.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 2. Emission Limitations (Continued):

#### Compliance Demonstration Method (Continued):

- (4) Calculate the mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used in the controlled coating operation during deviations specified in § 63.4563 (c) and (d), using Equation 1D of this section:

$$H_{UNC} = \sum_{h=1}^q (Vol_h)(D_h)(W_h) \quad (\text{Eq. 1D})$$

Where:

$H_{UNC}$  = Total mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used during all deviations specified in § 63.4563 (c) and (d) that occurred during the month in the controlled coating operation, kg.

$Vol_h$  = Total volume of coating, thinner and/or other additive, or cleaning material, h, used in the controlled coating operation during deviations, liters.

$D_h$  = Density of coating, thinner and/or other additives, or cleaning material, h, kg per liter.

$W_h$  = Mass fraction of organic HAP in coating, thinner and/or other additives, or cleaning material, h, kg organic HAP per kg coating. For reactive adhesives as defined in § 63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to Subpart PPPP.

q = Number of different coatings, thinners and/or other additives, and cleaning materials used.

40 CFR 63.4561 (j) Calculate the organic HAP emission reduction for each controlled coating operation using liquid-liquid material balances. *This section is omitted.*

40 CFR 63.4561 (k) *Calculate the total mass of coating solids used.* Determine the total mass of coating solids used, kg, which is the combined mass of coating solids for all the coatings used during each month in the coating operation or group of coating operations for which the permittee uses the emission rate with add-on controls option, using Equation 2 of § 63.4551.

40 CFR 63.4561 (l) Calculate the mass of organic HAP emissions for each month. Determine the mass of organic HAP emissions, kg, during each month, using Equation 4 of this section:

$$H_{HAP} = H_e - \sum_{i=1}^q (H_{C,i}) - \sum_{j=1}^r (H_{CSR,j}) \quad (\text{Eq. 4})$$

Where:

$H_{HAP}$  = Total mass of organic HAP emissions for the month, kg.

$H_e$  = Total mass of organic HAP emissions before add-on controls from all the coatings, thinners and/or other additives, and cleaning materials used during the month, kg, determined according to paragraph (f) of this section.

$H_{C,i}$  = Total mass of organic HAP emission reduction for controlled coating operation, i, not using a liquid-liquid material balance, during the month, kg, from Equation 1 of this section.

## SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

### 2. Emission Limitations (Continued):

#### Compliance Demonstration Method (Continued):

$H_{CSR,j}$  = Total mass of organic HAP emission reduction for coating operation, j, controlled by a solvent recovery system using a liquid-liquid material balance, during the month, kg, from Equation 3 of §63.4561 (j).

q = Number of controlled coating operations not controlled by a solvent recovery system using a liquid-liquid material balance.

r = Number of coating operations controlled by a solvent recovery system using a liquid-liquid material balance.

40 CFR 63.4561 (m) Calculate the organic HAP emission rate for the compliance period. Determine the organic HAP emission rate for the compliance period, kg (lb) of organic HAP emitted per kg (lb) coating solids used, using Equation 5 of this section:

$$H_{annual} = \frac{\sum_{y=1}^n H_{HAP,y}}{\sum_{y=1}^n M_{st,y}} \quad (\text{Eq. 5})$$

Where:

$H_{annual}$  = Organic HAP emission rate for the compliance period, kg organic HAP emitted per kg coating solids used.

$H_{HAP,y}$  = Organic HAP emissions for month, y, kg, determined according to Equation 4 of this section.

$M_{st,y}$  = Total mass of coating solids used during month, y, kg, from Equation 2 of § 63.4551.

y = Identifier for months.

n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).

40 CFR 63.4561 (n) Compliance demonstration. The organic HAP emission rate for the initial compliance period, calculated using Equation 5 of this section, must be less than or equal to the applicable emission limit for each subcategory in § 63.4490 or the predominant activity or facility-specific emission limit allowed in § 63.4490 (c). The permittee must keep all records as required by §§ 63.4530 and 63.4531. As part of the notification of compliance status required by § 63.4510, the permittee must identify the coating operation(s) for which the permittee used the emission rate with add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in § 63.4490, and the permittee achieved the operating limits required by § 63.4492 and the work practice standards required by § 63.4493.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations (Continued):****Compliance Demonstration Method (Continued):**

40 CFR 63.4563 (a) To demonstrate continuous compliance with the applicable emission limit in § 63.4490, the organic HAP emission rate for each compliance period, determined according to the procedures in § 63.4561, must be equal to or less than the applicable emission limit in § 63.4490. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in § 63.4560 is the end of a compliance period consisting of that month and the preceding 11 months. The permittee must perform the calculations in § 63.4561 on a monthly basis using data from the previous 12 months of operation. If the permittee is complying with a facility-specific emission limit under § 63.4490 (c), the permittee must also perform the calculation using Equation 1 in § 63.4490 (c) (2) on a monthly basis using the data from the previous 12 months of operation.

40 CFR 63.4563 (b) If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in § 63.4490, this is a deviation from the emission limitation for that compliance period that must be reported as specified in §§ 63.4510 (c) (6) and 63.4520 (a) (7).

40 CFR 63.4563 (c) The permittee must demonstrate continuous compliance with each operating limit required by § 63.4492 that applies to the permittee, as specified in SECTION E of this permit, when the coating line is in operation.

- (1) If an operating parameter is out of the allowed range specified in SECTION E of this permit, this is a deviation from the operating limit that must be reported as specified in §§ 63.4510 (c) (6) and 63.4520 (a) (7).
- (2) If an operating parameter deviates from the operating limit specified in SECTION E of this permit, then the permittee must assume that the emission capture system and add-on control device were achieving zero efficiency during the time period of the deviation, unless the permittee has other data indicating the actual efficiency of the emission capture system and add-on control device and the use of these data is approved by the Division.

40 CFR 63.4563 (d) The permittee must meet the requirements for bypass lines in § 63.4568 (b) for controlled coating operations for which the permittee does not conduct liquid-liquid material balances. If any bypass line is opened and emissions are diverted to the atmosphere when the coating operation is running, this is a deviation that must be reported as specified in §§ 63.4510 (c) (6) and 63.4520 (a) (7). For the purposes of completing the compliance calculation specified in §§ 63.4561 (h), the permittee must treat the materials used during a deviation on a controlled coating operation as if they were used on an uncontrolled coating operation for the time period of the deviation as indicated in Equation 1 of § 63.4561.

40 CFR 63.4563 (e) The permittee must demonstrate continuous compliance with the work practice standards in § 63.4493. If the permittee did not develop a work practice plan, or did not implement the plan, or did not keep records required by § 63.4530 (i) (8), this is a deviation from the work practice standards that must be reported as specified in §§ 63.4510 (c) (6) and 63.4520 (a) (7).



**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****2. Emission Limitations (Continued):****Compliance Demonstration Method (Continued):**

40 CFR 63.4563 (f) As part of each semiannual compliance report required in § 63.4520, the permittee must identify the coating operation(s) for which the emission rate with add-on controls option was used. If there were no deviations from the emission limitations, submit a statement that the permittee was in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in § 63.4490, and the permittee achieved the operating limits required by § 63.4492 and the work practice standards required by § 63.4493 during each compliance period.

40 CFR 63.4563 (g) During periods of startup, shutdown, or malfunction of the emission capture system, add-on control device, or coating operation that may affect emission capture or control device efficiency, the permittee must operate in accordance with the startup, shutdown, and malfunction plan required by § 63.4500 (c).

40 CFR 63.4563 (j) The permittee must maintain records as specified in §§ 63.4530 and 63.4531.

**3. Testing Requirements:**

40 CFR 63.4520 (b) Performance test reports. If the emission rate with add-on controls option is used, the permittee must submit reports of performance test results for emission capture systems and add-on control devices no later than 60 days after completing the tests as specified in § 63.10 (d) (2).

40 CFR 63.4541 (a) *Determine the mass fraction of organic HAP for each material used.* The permittee must determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during the compliance period by using one of the options in paragraphs (a) (1) through (5) of this section.

(1) *Method 311 (appendix A to 40 CFR part 63).* The permittee may use Method 311 for determining the mass fraction of organic HAP. Use the procedures specified in paragraphs (a) (1) (i) and (ii) of this section when performing a Method 311 test.

(i) Count each organic HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200 (d) (4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, it does not have to be counted. Express the mass fraction of each organic HAP that is counted as a value truncated to four places after the decimal point (e.g., 0.3791).

(ii) Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three places after the decimal point (e.g., 0.763).

(2) *Method 24 (appendix A to 40 CFR part 60).* For coatings, the permittee may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****3. Testing Requirements (Continued):**

For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, the permittee may use the alternative method contained in appendix A to Subpart PPPP, rather than Method 24. The permittee may use the volatile fraction that is emitted, as measured by the alternative method in appendix A to Subpart PPPP, as a substitute for the mass fraction of organic HAP.

- (3) *Alternative method.* The permittee may use an alternative test method for determining the mass fraction of organic HAP once the Division has approved it. The permittee must follow the procedure in § 63.7 (f) to submit an alternative test method for approval.
- (4) *Information from the supplier or manufacturer of the material.* The permittee may rely on information other than that generated by the test methods specified in paragraphs (a) (1) through (3) of this section, such as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200 (d) (4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, it does not have to be counted. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, the permittee may rely on manufacturer's data that expressly states the organic HAP or volatile matter mass fraction emitted. If there is a disagreement between such information and results of a test conducted according to paragraphs (a) (1) through (3) of this section, then the test method results will take precedence unless, after consultation it is demonstrated to the satisfaction of the enforcement agency that the formulation data are correct.
- (5) *Solvent blends.* Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP which must be counted toward the total organic HAP mass fraction of the materials. When test data and manufacturer's data for solvent blends are not available, the permittee may use the default values for the mass fraction of organic HAP in these solvent blends listed in Table 3 or 4 of Subpart PPPP. If the tables are used, the permittee must use the values in Table 3 for all solvent blends that match Table 3 entries according to the instructions for Table 3, and the permittee may use Table 4 only if the solvent blends in the materials the permittee uses do not match any of the solvent blends in Table 3 and the permittee knows only whether the blend is aliphatic or aromatic. However, if the results of a Method 311 (appendix A to 40 CFR part 63) test indicate higher values than those listed on Table 3 or 4 of Subpart PPPP, the Method 311 results will take precedence unless, after consultation the permittee demonstrates to the satisfaction of the enforcement agency that the formulation data are correct.

40 CFR 63.4541 (b) *Determine the mass fraction of coating solids for each coating.* The permittee must determine the mass fraction of coating solids (kg (lb) of coating solids per kg (lb) of coating) for each coating used during the compliance period by a test, by information provided by the supplier or the manufacturer of the material, or by calculation, as specified in paragraphs (b) (1) through (3) of this section.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****3. Testing Requirements (Continued):**

- (1) *Method 24 (appendix A to 40 CFR part 60)*. Use Method 24 for determining the mass fraction of coating solids. For reactive adhesives in which some of the liquid fraction reacts to form solids, the permittee must use the alternative method contained in appendix A to Subpart PPPP rather than Method 24, to determine the mass fraction of coating solids.
- (2) *Alternative method*. The permittee may use an alternative test method for determining the solids content of each coating once the Division has approved it. The permittee must follow the procedure in § 63.7 (f) to submit an alternative test method for approval.
- (3) *Information from the supplier or manufacturer of the material*. The permittee may obtain the mass fraction of coating solids for each coating from the supplier or manufacturer. If there is disagreement between such information and the test method results, then the test method results will take precedence unless, after consultation the permittee demonstrates to the satisfaction of the enforcement agency that the formulation data are correct.

40 CFR 63.4564 (a) The permittee must conduct each performance test required by § 63.4560 according to the requirements in § 63.7 (e) (1) and under the conditions in this section, unless the permittee obtains a waiver of the performance test according to the provisions in § 63.7 (h).

- (1) *Representative coating operation operating conditions*. The permittee must conduct the performance test under representative operating conditions for the coating operation. Operations during periods of startup, shutdown, or malfunction and during periods of nonoperation do not constitute representative conditions. The permittee must record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation.
- (2) *Representative emission capture system and add-on control device operating conditions*. The permittee must conduct the performance test when the emission capture system and add-on control device is operating at a representative inlet concentration. The permittee must record information that is necessary to document emission capture system and add-on control device operating conditions during the test and explain why the conditions represent normal operation.

40 CFR 63.4564 (b) The permittee must conduct each performance test of an emission capture system according to the requirements in § 63.4565. The permittee must conduct each performance test of an add-on control device according to the requirements in § 63.4566.

40 CFR 63.4565 The permittee must use the procedures and test methods in this section to determine capture efficiency as part of the performance test required by § 63.4560.

40 CFR 63.4565 (a) *Assuming 100 percent capture efficiency*. The permittee may assume the capture system efficiency is 100 percent if both of the conditions in paragraphs (a) (1) and (2) of this section are met:

- (1) The capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and directs all the exhaust gases from the enclosure to an add-on control device.

## **SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **3. Testing Requirements (Continued):**

- (2) All coatings, thinners and/or other additives, and cleaning materials used in the coating operation are applied within the capture system; coating solvent flash-off, curing, and drying occurs within the capture system; and the removal or evaporation of cleaning materials from the surfaces they are applied to occurs within the capture system. For example, this criterion is not met if parts enter the open shop environment when being moved between a spray booth and a curing oven.

40 CFR 63.4565 (b) Measuring capture efficiency. *This subsection is omitted.*

40 CFR 63.4565 (c) Liquid-to-uncaptured gas protocol using a temporary total enclosure or building enclosure. *This subsection is omitted.*

40 CFR 63.4565 (d) Gas-to-gas protocol using a temporary total enclosure or a building enclosure. *This subsection is omitted.*

40 CFR 63.4565 (e) Alternative capture efficiency protocol. *This subsection is omitted.*

40 CFR 63.4566 The permittee must use the procedures and test methods in this section to determine the add-on control device emission destruction or removal efficiency as part of the performance test required by § 63.4560. The permittee must conduct three test runs as specified in § 63.7 (e) (3) and each test run must last at least 1 hour.

40 CFR 63.4566 (a) For all types of add-on control devices, use the test methods specified in paragraphs (a) (1) through (5) of this section.

- (1) Use Method 1 or 1A of appendix A to 40 CFR 60, as appropriate, to select sampling sites and velocity traverse points.
- (2) Use Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A to 40 CFR part 60, as appropriate, to measure gas volumetric flow rate.
- (3) Use Method 3, 3A, or 3B of appendix A to 40 CFR part 60, as appropriate, for gas analysis to determine dry molecular weight.
- (4) Use Method 4 of appendix A to 40 CFR part 60, to determine stack gas moisture.
- (5) Methods for determining gas volumetric flow rate, dry molecular weight, and stack gas moisture must be performed, as applicable, during each test run.

40 CFR 63.4566 (b) Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control device simultaneously, using either Method 25 or 25A of appendix A to 40 CFR part 60.

- (1) Use Method 25 if the add-on control device is an oxidizer and the permittee expects the total gaseous organic concentration as carbon to be more than 50 parts per million (ppm) at the control device outlet.
- (2) Use Method 25A if the add-on control device is an oxidizer and the permittee expects the total gaseous organic concentration as carbon to be 50 ppm or less at the control device outlet.
- (3) Use Method 25A if the add-on control device is not an oxidizer.

40 CFR 63.4566 (c) *This subsection is omitted.*

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****3. Testing Requirements (Continued):**

40 CFR 63.4566 (d) For each test run, determine the total gaseous organic emissions mass flow rates for the inlet and outlet of the add-on control device, using Equation 1 of this section. If there is more than one inlet or outlet to the add-on control device, the permittee must calculate the total gaseous organic mass flow rate using Equation 1 of this section for each inlet and each outlet and then total all of the inlet emissions and total all of the outlet emissions:

$$M_f = Q_{sd} C_c (12)(0.0416)(10^{-6}) \quad (\text{Eq. 1})$$

Where:

$M_f$  = Total gaseous organic emissions mass flow rate, kg per hour (kg/h).

$C_c$  = Concentration of organic compounds as carbon in the vent gas, as determined by Method 25 or Method 25A, parts per million by volume (ppmv), dry basis.

$Q_{sd}$  = Volumetric flow rate of gases entering or exiting the add-on control device, as determined by Method 2, 2A, 2C, 2D, 2F, or 2G, dry standard cubic meters per hour (dscm/h).

0.0416 = Conversion factor for molar volume, kg-moles per cubic meter ( $\text{mol/m}^3$ ) (@ 293 Kelvin (K) and 760 millimeters of mercury (mmHg)).

40 CFR 63.4566 (e) For each test run, determine the add-on control device organic emissions destruction or removal efficiency, using Equation 2 of this section:

$$DRE = \frac{M_{fi} - M_{fo}}{M_{fi}} \times 100 \quad (\text{Eq. 2})$$

Where:

DRE = Organic emissions destruction or removal efficiency of the add-on control device, percent.

$M_{fi}$  = Total gaseous organic emissions mass flow rate at the inlet(s) to the add-on control device, using Equation 1 of this section, kg/h.

$M_{fo}$  = Total gaseous organic emissions mass flow rate at the outlet(s) of the add-on control device, using Equation 1 of this section, kg/h.

40 CFR 63.4566 (f) Determine the emission destruction or removal efficiency of the add-on control device as the average of the efficiencies determined in the three test runs and calculated in Equation 2 of this section.

40 CFR 63.4567 During the performance test required by § 63.4560 and described in §§ 63.4564, 63.4565, and 63.4566, the permittee must establish the operating limits required by § 63.4492 according to this section, unless the permittee has received approval for alternative monitoring and operating limits under § 63.8 (f) as specified in § 63.4492.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****3. Testing Requirements (Continued):**

40 CFR 63.4567 (a) *Thermal oxidizers*. If the permittee's add-on control device is a thermal oxidizer, establish the operating limits according to paragraphs (a) (1) and (2) of this section.

- (1) During the performance test, the permittee must monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. The permittee must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs.
- (2) Use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This average combustion temperature is the minimum operating limit for the permittee's thermal oxidizer.

40 CFR 63.4567 (f) Emission capture systems. The operating limit for a PTE is specified in SECTION E of this permit.

**4. Monitoring Requirements:**

40 CFR 63.4568 (a) *General*. The permittee must install, operate, and maintain each CPMS specified in paragraphs (c), (e), (f), and (g) of this section according to paragraphs (a) (1) through (6) of this section. The permittee must install, operate, and maintain each CPMS specified in paragraphs (b) and (d) of this section according to paragraphs (a) (3) through (5) of this section.

- (1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. The permittee must have a minimum of four equally spaced successive cycles of CPMS operation in 1-hour.
- (2) The permittee must determine the average of all recorded readings for each successive 3-hour period of the emission capture system and add-on control device operation.
- (3) The permittee must record the results of each inspection, calibration, and validation check of the CPMS.
- (4) The permittee must maintain the CPMS at all times and have available necessary parts for routine repairs of the monitoring equipment.
- (5) The permittee must maintain the CPMS and collect emission capture system and add-on control device parameter data at all times that a controlled coating operation is operating, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, if applicable, calibration checks and required zero and span adjustments).
- (6) The permittee must not use emission capture system or add-on control device parameter data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities when calculating data averages. The permittee must use all the data collected during all other periods in calculating the data averages for determining compliance with the emission capture system and add-on control device operating limits.
- (7) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the CPMS to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations is a deviation from the monitoring requirements.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****4. Monitoring Requirements (Continued):**

40 CFR 63.4568 (b) Capture system bypass line. The permittee must meet the requirements of paragraphs (b) (1) and (2) of this section for each emission capture system that contains bypass lines that could divert emissions away from the add-on control device to the atmosphere.

- (1) The permittee must monitor or secure the valve or closure mechanism controlling the bypass line in a nondiverting position in such a way that the valve or closure mechanism cannot be opened without creating a record that the valve was opened. The method used to monitor or secure the valve or closure mechanism must meet one of the requirements specified in paragraphs (b) (1) (i) through (v) of this section.
  - (i) *Flow control position indicator*. This subsection is omitted
  - (ii) *Car-seal or lock-and-key valve closures*. This subsection is omitted.
  - (iii) *Valve closure monitoring*. This subsection is omitted.
  - (iv) *Automatic shutdown system*. Use an automatic shutdown system in which the coating operation is stopped when flow is diverted by the bypass line away from the add-on control device to the atmosphere when the coating operation is running. The permittee must inspect the automatic shutdown system at least once every month to verify that it will detect diversions of flow and shut down the coating operation.
  - (v) *Flow direction indicator*. This subsection is omitted.
- (2) If any bypass line is opened, the permittee must include a description of why the bypass line was opened and the length of time it remained open in the semiannual compliance reports required in § 63.4520

40 CFR 63.4568 (c) *Thermal oxidizers and catalytic oxidizers*. If the permittee is using a thermal oxidizer or catalytic oxidizer as an add-on control device (including those used with concentrators or with carbon adsorbers to treat desorbed concentrate streams), the permittee must comply with the requirements in paragraph (c) (1) through (3) of this section:

- (1) For a thermal oxidizer, install a gas temperature monitor in the firebox of the thermal oxidizer or in the duct immediately downstream of the firebox before any substantial heat exchange occurs.
- (2) *This subsection is omitted.*
- (3) For all thermal oxidizers and catalytic oxidizers, the permittee must meet the requirements in paragraphs (a) and (c) (3) (i) through (v) of this section for each gas temperature monitoring device.
  - (i) Locate the temperature sensor in a position that provides a representative temperature.
  - (ii) Use a temperature sensor with a measurement sensitivity of 5 degrees Fahrenheit or 1.0 percent of the temperature value, whichever is larger.
  - (iii) Before using the sensor for the first time or when relocating or replacing the sensor, perform a validation check by comparing the sensor output to a calibrated temperature measurement device or by comparing the sensor output to simulated temperature.
  - (iv) Conduct an accuracy audit every quarter and after every deviation. Accuracy audit methods include comparisons of sensor output to redundant temperature sensors, to calibrated temperature measurement devices, or to temperature simulation devices.
  - (v) Conduct a visual inspection of each sensor every quarter if redundant temperature sensors are not use.

40 CFR 63.4568 (d) Regenerative carbon adsorbers. *This subsection is omitted.*

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****4. Monitoring Requirements (Continued):**

40 CFR 63.4568 (e) Condensers. *This subsection is omitted.*

40 CFR 63.4568 (f) Concentrators. *This subsection is omitted.*

40 CFR 63.4568 (g) Emission capture systems. The capture system monitoring system must comply with the applicable requirements in paragraphs (g) (1) and (2) of this section.

(1) For each flow measurement device, the permittee must meet the requirements in paragraphs (a) and (g) (1) (i) through (vii) of this section.

- (i) Locate a flow sensor in a position that provides a representative flow measurement in the duct from each capture device in the emission capture system to the add-on control device.
- (ii) Use a flow sensor with an accuracy of at least 10 percent of the flow.
- (iii) Perform an initial sensor calibration in accordance with the manufacturer's requirements.
- (iv) Perform a validation check before initial use or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values with electronic signal simulations or via relative accuracy testing.
- (v) Conduct an accuracy audit every quarter and after every deviation. Accuracy audit methods include comparisons of sensor values with electronic signal simulations or via relative accuracy testing.
- (vi) Perform leak checks monthly.
- (vii) Perform visual inspections of the sensor system quarterly if there is no redundant sensor.

(2) For each pressure drop measurement device, the permittee must comply with the requirements in paragraphs (a) and (g) (2) (i) through (vii) of this section.

- (i) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure drop across each opening the permittee is monitoring.
- (ii) Use a pressure sensor with an accuracy of at least 0.5 inches of water column or 5 percent of the measured value, whichever is smaller.
- (iii) Perform an initial calibration of the sensor according to the manufacturer's requirements.
- (iv) Conduct a validation check before initial operation or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.
- (v) Conduct accuracy audits every quarter and after every deviation. Accuracy audits include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.
- (vi) Perform monthly leak checks on pressure connections. A pressure of at least 1.0 inches of water column to the connection must yield a stable sensor result for at least 15 seconds.
- (vii) Perform a visual inspection of the sensor at least monthly if there is no redundant sensor.



**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****5. Recordkeeping Requirements:**

The permittee must collect and keep records of the data and information specified in this section. Failure to collect and keep these records is a deviation from the applicable standard.

- A. 40 CFR 63.4530 (a) A copy of each notification and report that the permittee submitted to comply with this subpart, and the documentation supporting each notification and report. If the permittee is using the predominant activity alternative under § 63.4490 (c), the permittee must keep records of the data and calculations used to determine the predominant activity. If the permittee is using the facility specific emission limit alternative under § 63.4490 (c), the permittee must keep records of the data used to calculate the facility specific emission limit for the initial compliance demonstration. The permittee must also keep records of any data used in each annual predominant activity determination and in the calculation of the facility-specific emission limit for each 12-month compliance period included in the semi-annual compliance reports.
- B. 40 CFR 63.4530 (b) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the mass fraction of coating solids for each coating. If the permittee conducted testing to determine mass fraction of organic HAP, density, or mass fraction of coating solids, the permittee must keep a copy of the complete test report. If the permittee uses information provided to them by the manufacturer or supplier of the material that was based on testing, the permittee must keep the summary sheet of results provided to them by the manufacturer or supplier. The permittee is not required to obtain the test report or other supporting documentation from the manufacturer or supplier.
- C. 40 CFR 63.4530 (c) For each compliance period, the records specified in paragraphs (c) (1) through (4) of this section.
  - (1) A record of the coating operations on which the permittee used each compliance option and the time periods (beginning and ending dates and times) for each option the permittee used.
  - (2) For the compliant material option. *This subsection is omitted.*
  - (3) For the emission rate without add-on controls option. *This subsection is omitted.*
  - (4) For the emission rate with add-on controls option, records of the calculations specified in paragraphs (c) (4) (i) through (v) of this section.
    - (i) The calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1 and 1A through 1C of § 63.4551; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to § 63.4551 (e) (4);
    - (ii) The calculation of the total mass of coating solids used each month using Equation 2 of § 63.4551;
    - (iii) The calculation of the mass of organic HAP emission reduction by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of § 63.4561 and Equations 2, 3, and 3A through 3C of § 63.4561, as applicable;
    - (iv) The calculation of each month's organic HAP emission rate using Equation 4 of § 63.4561; and

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****5. Recordkeeping Requirements (Continued):**

- (v) The calculation of each 12-month organic HAP emission rate using Equation 5 of § 63.4561.
- D. 40 CFR 63.4530 (d) A record of the name and mass of each coating, thinner and/or other additive, and cleaning material used during each compliance period. If the permittee is using the compliant material option for all coatings at the source, the permittee may maintain purchase records for each material used rather than a record of the mass used.
- E. 40 CFR 63.4530 (e) A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period.
- F. 40 CFR 63.4530 (f) A record of the mass fraction of coating solids for each coating used during each compliance period.
- G. 40 CFR 63.4530 (g) If the permittee uses an allowance in Equation 1 of § 63.4551 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to § 63.4551 (e) (4), the permittee must keep records of the information specified in paragraphs (g) (1) through (3) of this section.
  - (1) The name and address of each TSDF to which the permittee sent waste materials for which the permittee uses an allowance in Equation 1 of § 63.4551, a statement of which subparts under 40 CFR 262, 264, 265, and 266 apply to the facility; and the date of each shipment.
  - (2) Identification of the coating operations producing waste materials included in each shipment and the month or months in which you used the allowance for these materials in Equation 1 of § 63.4551.
  - (3) The methodology used in accordance with § 63.4551 (e) (4) to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. This must include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment.
- H. 40 CFR 63.4530 (h) The permittee must keep records of the date, time, and duration of each deviation.
- I. 40 CFR 63.4530 (i) If the permittee uses the emission rate with add-on controls option, the permittee must keep the records specified in paragraphs (i) (1) through (8) of this section.
  - (1) For each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction.
  - (2) The records in § 63.6 (e) (3) (iii) through (v) related to startup, shutdown, or malfunction.
  - (3) The records required to show continuous compliance with each operating limit specified in SECTION E of this permit.
  - (4) For each capture system that is a PTE, the data and documentation the permittee used to support a determination that the capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and has a capture efficiency of 100 percent, as specified in § 63.4564 (a).
  - (5) For each capture system that is not a PTE, *This subsection has been omitted.*

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****5. Recordkeeping Requirements (Continued):**

- (6) The records specified in paragraphs (i) (6) (i) and (ii) of this section for each add-on control device organic HAP destruction or removal efficiency determination as specified in § 63.4566.
  - (i) Records of each add-on control device performance test conducted according to §§ 63.4564 and 63.4566.
  - (ii) Records of the coating operation conditions during the add-on control device performance test showing that the performance test was conducted under representative operating conditions.
- (7) Records of the data and calculations the permittee used to establish the emission capture and add-on control device operating limits as specified in § 63.4567 and to document compliance with the operating limits as specified in SECTION E of this permit.
- (8) A record of the work practice plan required by § 63.4493 and documentation that the permittee is implementing the plan on a continuous basis.
- J. 40 CFR 63.4531 (a) The permittee records must be in a form suitable and readily available for expeditious review, according to § 63.10 (b) (1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database.
- K. 40 CFR 63.4531 (b) As specified in § 63.10 (b) (1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- L. 40 CFR 63.4531 (c) The permittee must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to § 63.10 (b) (1). The permittee may keep the records off-site for the remaining 3 years.

**6. Reporting Requirements:**

- A. 40 CFR 63.4490 (c) The permittee must determine the predominant activity at the facility annually and include the determination in the next semi-annual compliance report required by § 63.4520 (a). The permittee must use kg (lb) of solids used as a measure of relative surface coating activity over a representative period of operation. The permittee may estimate the relative mass of coating solids used from parameters other than coating consumption and mass solids content (*e.g.*, design specifications for the parts or products coated and the number of items produced). The determination of predominant activity must accurately reflect current and projected coating operations and must be verifiable through appropriated documentation. The use of parameters other than coating consumption and mass solids content must be approved by the Division. The permittee may use data for any reasonable time period of at least 1 year in determining the relative amount of coating activity, as long as they represent the way the source will continue to operate in the future and are approved by the Division.
- B. 40 CFR 63.4491 If the permittee switches between compliance options for any coating operation or group of coating operations, the permittee must document this switch as required by § 63.4530 (c), and must report it in the next semiannual compliance report required by § 63.4520.
- C. 40 CFR 63.4510 (c) Notification of compliance status. The permittee must submit the notification of compliance status required by § 63.9 (h) no later than May 30, 2008.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****6. Reporting Requirements (Continued):**

D. 40 CFR 63.4520 (a) Semiannual compliance reports. The permittee must submit semiannual compliance reports for each affected source according to the requirements of paragraphs (a) (1) through (7) of this section. The semiannual compliance reporting requirements may be satisfied by reports required under other parts of the Clean Air Act (CAA), as specified in paragraph (a) (2) of this section.

(1) Dates. The permittee must prepare and submit each semiannual compliance report according to the dates specified in paragraphs (a) (1) (i) through (iv) of this section. Note that the information reported for each of the months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.

(i) The first semiannual compliance report must cover the first semiannual reporting period which begins the day after the end of the initial compliance period, May 30, 2008 and ends on June 30, 2008.

(ii) Each subsequent semiannual compliance report must cover the subsequent semiannual report period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(iii) Each semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(iv) The permittee may submit the first and subsequent compliance reports according to the dates specified in SECTION F (6) of this permit.

(2) Inclusion with title V report. The permittee must report all deviations as defined in Subpart PPPP in the semiannual monitoring report required by SECTION F (5) of this permit. If an affected source submits a semiannual compliance report pursuant to this section along with, or as part of, the semiannual monitoring report required by SECTION F (5) and the semiannual compliance report includes all required information concerning deviations from any emission limitation in Subpart PPPP, its submission will be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a semiannual compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the Division.

(3) General requirements. The semiannual compliance report must contain the information specified in paragraphs (a) (3) (i) through (vii) of this section, and the information specified in paragraphs (a) (4) through (7) and (c) (1) of this section that is applicable to the affected source.

(i) Company name and address.

(ii) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(iii) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****6. Reporting Requirements (Continued):**

- (iv) Identification of the compliance option or options specified in § 63.4491 that the permittee used on each coating operation during the reporting period. If the permittee switched between compliance options during the reporting period, the permittee must report the beginning and ending dates for each option used.
  - (v) If the permittee used the emission rate without add-on controls or the emission rate with add-on controls compliance option (§ 63.4491 (b) or (c)), the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period.
  - (vi) If the permittee used the predominant activity alternative (§ 63.4490 (c) (1)), include the annual determination of predominant activity if it was not included in the previous semi-annual compliance report.
  - (vii) If the permittee used the facility-specific emission limit alternative (§ 63.4490 (c) (2)), include the calculation of the facility-specific emission limit for each 12-month compliance period during the 6-month reporting period.
- (4) No deviations. If there were no deviations from the emission limitations in §§ 63.4490, 63.4492, and 63.4493 that apply to the permittee, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. If the permittee used the emission rate with add-on controls option and there were no periods during which the continuous parameter monitoring systems (CPMS) were out-of-control as specified in § 63.8 (c) (7), the semiannual compliance report must include a statement that there were no periods during which the CPMS were out-of-control during the reporting period.
- (5) Deviations: Compliant material option. *This section is omitted.*
- (6) Deviations: Emission rate without add-on controls option. *This section is omitted.*
- (7) Deviations: Emission rate with add-on controls option. If the permittee used the emission rate with add-on controls option and there was a deviation from an emission limitation (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere), the semiannual compliance report must contain the information in paragraphs (a) (7) (i) through (xiv) of this section. This includes periods of startup, shutdown, and malfunction during which deviations occurred.
- (i) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in § 63.4490.
  - (ii) The calculations used to determine the 12-month organic HAP emission rate for each compliance period in which a deviation occurred. The permittee must provide the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1 and 1A through 1C of § 63.4551; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to § 63.4551 (e) (4); the calculation of the total mass of coating solids used each month using Equation 2 of § 63.4551; the calculation of the total mass of organic HAP emission reduction each month by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of § 63.4561, and Equations 2, 3, and 3A through 3C of § 63.4561, as applicable;

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****6. Reporting Requirements (Continued):**

the calculation of the total mass of organic HAP emissions each month using Equation 4 of § 63.4561; and the calculation of the 12-month organic HAP emission rate using Equation 5 of § 63.4561. The permittee need not submit the background data supporting these calculations (*e.g.*, information provided by materials suppliers or manufacturers, or test reports).

- (iii) The date and time that each malfunction started and stopped.
  - (iv) A brief description of the CPMS.
  - (v) The date of the latest CPMS certification or audit.
  - (vi) The date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks.
  - (vii) The date and time, and duration that each CPMS was out-of-control, including the information in § 63.8 (c) (8).
  - (viii) The date and time period of each deviation from an operating limit in SECTION E of this permit; date and time period of any bypass of the add-on control device; and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
  - (ix) A summary of the total duration of each deviation from an operating limit in SECTION E of this permit and each bypass of the add-on control device during the semiannual reporting period, and the total duration as a percent of the total source operating time during that semiannual reporting period.
  - (x) A breakdown of the total duration of the deviations from the operating limits in SECTION E of this permit and bypasses of the add-on control device during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
  - (xi) A summary of the total duration of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total source operating time during that semiannual reporting period.
  - (xii) A description of any changes in the CPMS, coating operation, emission capture system, or add-on control device since the last semiannual reporting period.
  - (xiii) For each deviation from the work practice standards, a description of the deviation, the date and time period of the deviation, and the actions taken to correct the deviation.
- E. 40 CFR 63.4520 (c) Startup, shutdown, malfunction reports. If the emission rate with add-on controls option was used and the permittee had a startup, shutdown, or malfunction during the semiannual reporting period, the permittee must submit the reports specified in paragraphs (c) (1) and (2) of this section.
- (1) If the permittee actions were consistent with the startup, shutdown, and malfunction plan, the permittee must include the information specified in § 63.10 (d) in the semiannual compliance report required by paragraph (a) of this section.
  - (2) If the permittee actions were not consistent with the startup, shutdown, and malfunction plan, the permittee must submit an immediate startup, shutdown, and malfunction report as described in paragraphs (c) (2) (i) and (ii) of this section.

**SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****6. Reporting Requirements (Continued):**

- (i) The permittee must describe the actions taken during the event in a report delivered by facsimile, telephone, or other means to the Division within 2 working days after starting actions that are inconsistent with the plan.
- (ii) The permittee must submit a letter to the Division within 7 working days after the end of the event, unless the permittee has made alternative arrangements with the Division as specified in § 63.10 (d) (5) (ii). The letter must contain the information specified in § 63.10 (d) (5) (ii).

**7. Specific Control Equipment Operating Conditions:**

- A. 40 CFR 63.4492 (b) For any controlled coating operation(s) on which the permittee uses the emission rate with add-on controls option, except those for which a solvent recovery system is used and a liquid-liquid material balance is conducted according to § 63.4561 (j), the permittee must meet the operating limits specified in SECTION E. These operating limits apply to the emission capture and control systems on the coating operation(s) for which the add-on controls option is used. The permittee must establish operating limits during the performance test according to the requirements in § 63.4567. The permittee must meet the operating limits at all times after they are established.
- B. 40 CFR 63.4500 (a) (2) (ii) The coating operation(s) must be in compliance with the operating limits for emission capture systems and add-on control devices required by § 63.4492 at all times except during periods of startup, shutdown, and malfunction, and except for solvent recovery systems for which the permittee conducts a liquid-liquid material balance according to § 63.4561 (j).
- C. 40 CFR 63.4500 (b) The permittee must always operate and maintain the affected source, including all air pollution control and monitoring equipment used for the purpose of complying with this subpart, according to the provisions in § 63.6 (e) (1) (i).
- D. 40 CFR 63.4500 (c) If the affected source uses an emission capture system and add-on control device, the permittee must develop and implement a written startup, shutdown, and malfunction plan according to the provisions in § 63.6 (e) (3). The plan must address the startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system or the add-on control device. The plan must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures.

**SECTION C - INSIGNIFICANT ACTIVITIES**

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. Low Gloss Mask Washer 12-15 ppm Challenge 4855	N/A
2. Spraymation Booth – Test Paint	401 KAR 59:010
3. Plating Lab – Two (2) Hamilton Laboratory Hoods	401 KAR 59:010
4. Plating – One (1) Chrome Atmospheric Evaporator	401 KAR 59:010
5. Molding – Safety Kleen Parts Washer	N/A
6. Plating – Wastewater Treatment	401 KAR 59:010



## **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS**

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Volatile Organic Compound (VOC) emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
3. PM<sub>10</sub> emissions, defined as PM totals, shall not exceed 15 tons per year significant net emission rate for each of the following two groups as listed in state regulation 401 KAR 51:001, Section 221.

### **EMISSION GROUP A:**

Emission Group 2 (S9A), High Gloss Paint System (High Gloss West)

Emission Group 3 (SL3, SL4, SL5, SL6, SL1, SL2) Low Gloss East and West Lines

Emission Group 4 (SE1), 5 (SE2), 6 (SE3), 7 (SE4), 8 (SE5), All electroplating process tanks and equipment

Emission Groups 10 (B1), 11 (B2), 13 (B3), Cleaver Brooks Boilers 1-3 (8 mmBTU/hr heat input each)

Emission Group 17 (B6), Kewaunee Boiler 6 (1.7 mmBTU/hr heat input)

### **EMISSION GROUP B:**

Emission Group 12 (SR1A), Resist line #1

Emission Group 14 (SK5A), High Gloss Painting System (High Bake)

Emission Group 15 (B4), 16 (B5), Cleaver Brooks Boilers 4-5 (8 mmBTU/hr heat input each)

4. All records of fuel type and monthly usage amounts shall be kept on a facility wide basis and not required to be kept on a process by process basis.
5. All engineering evaluations shall be submitted to the Permit Review Branch of the Division for Air Quality.

**SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)****Continuous Compliance Plan****Emission Units 02 (High Gloss), 03 (Low Gloss), 12 (Resist), 14 (High Bake), 18 and 19 (Paint Mix Rooms)**

VOC Emissions from each of the four coating/paint lines will be used in making the compliance demonstration with the 85 % control requirement on a **daily** basis. The 85 % control requirement applies to each line. The coating line for each plastic parts operation shall have the same definition as a coating line in 401 KAR 59:225 §1(7). Compliance with the 85 % control of VOC emissions shall be demonstrated daily based on continuous measurements taken by the following methodology:

1. The daily overall control efficiency demonstration shall be based on the most recent compliance test.
2. The control efficiency for emission units **02, 03, 12** and **14** is the product of the overall capture efficiency (the average of the three Permanent Total Enclosures (PTE)) and the weighted average (by paint usage) Regenerative Thermal Oxidizer (RTO) destruction efficiency.
3. The VOC emissions from the miscellaneous operations at the facility that are **NOT controlled** are as follows:

Parts rack for emission units <b>03</b> and <b>12</b> when outside PTE	0.67 lb/hr
Parts rack for emission units <b>03</b> and <b>12</b> when inside PTE	0.00 lb/hr
Mask clean-up for emission units <b>03</b> and <b>12</b>	0.17 lb/hr
Emission unit <b>14</b> water treatment system	0.00 lb/hr
Emission unit <b>03</b> water treatment system	0.00 lb/hr
Emission unit <b>14</b> solvent storage (8,000 & 7,750 gal. tanks)	0.15 lb/hr
Emission unit <b>02</b> solvent storage (8,000 & 7,750 gal. tanks)	0.15 lb/hr
4. The permittee shall record all hours when either paint mix room is exhausted to the atmosphere. The VOC emissions (lb/hr) for each paint mix room (emission units **18** and **19**) measured during the most recent compliance test shall be multiplied by the hours of venting the paint mix rooms to the atmosphere to determine the lbs of VOC emissions. This value shall be used to calculate the overall control efficiency of that entire line.

**Compliance Demonstration Equation:**

Line Control efficiency (%) =  $[1 - (\text{atmospheric emissions} / \text{total uncontrolled emissions})] \times 100$

**SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)****Continuous Compliance Plan (Continued)****Emission Units 02, 03, 12, 14, 18 and 19**

Where

**atmospheric emissions** = [line solvent usage for the day (lbs)] x [(1.0 – Overall control efficiency for paint lines (emission units **02, 03, 12** and **14**))] + [(hours of emissions from paint mix room] x [(lb/hr) emission rate determined during the most recent compliance test]] + [daily emissions from other ancillary sources on line (lbs)]

**total uncontrolled emissions** = [line solvent usage for the day (lbs)] + [(hours of emissions from paint mix room] x [(lb/hr) emission rate determined during the most recent compliance test]] + [daily emissions from other ancillary sources on line (lbs)]

5. The Line Control efficiency (%) is the value that is compared to the permit limitation of 85 % control.
6. The permittee will NOT be required to quantify paint usage on a 24-hour basis for the purposes of compliance with 401 KAR 51:017, however the permittee may be required to calculate the daily overall and/or line control efficiency upon request by the Division. Daily compliance with the 85 % control requirement will be demonstrated based on the integrity of the PTEs and operating temperatures of the RTOs.

**PTE Monitoring**

Continuous compliance with the 100% capture requirement will be demonstrated when the facial velocity of air entering the PTE is at least 200 feet per minute for emission units **02** and **14** and when the pressure differential is at least negative 0.007 inches of H<sub>2</sub>O (from the outside of the PTE to the inside of the PTE) for emission units **03** and **12**.

**PTE Monitoring for Emission units 02 (High Gloss) and 14 (High Bake)**

For emission units **02** and **14**, the permittee shall monitor velocity in the duct immediately downstream from the two supply fans at the PTE entrance (where the chain carrying parts to be painted enters the PTE) and the PTE exit (where the chain carrying the dry painted parts leaves the PTE) to ensure a 200-fpm facial velocity at each of the PTE's natural draft openings. The velocity measured at the natural draft opening must be at least 200-fpm to meet the PTE criteria. Compliance shall be demonstrated when the velocities for all 3-hour block averaging periods in the supply air ducts are equal to or greater than the velocities measured during the most recent performance test approved by the Division.

**SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)****Continuous Compliance Plan (Continued)****PTE Monitoring for Emission units 02 (High Gloss) and 14 (High Bake) (Continued)**

The damper of the exhaust fan that pulls air from the 4 vestibules serving emission unit **14** and the 6 vestibules serving emission unit **02** shall be set to assure that a negative pressure of at least 0.007 inches of H<sub>2</sub>O is achieved in the “middle” of the large PTEs that surround emission units **14** and **02**. Compliance will be assumed to be demonstrated when the velocities for all 3-hour block averaging periods in the 2 exhaust ducts (High Bake vestibules (4) and High Gloss vestibules (6)) are equal to or greater than the velocities used to establish the set points needed to achieve negative 0.007 inches of H<sub>2</sub>O in each of the vestibules.

The velocity values for the exhaust ducts may change slightly as compared to the official compliance test values that are required to be conducted once every 5 years because the exhaust airflow rates may have to be increased or decreased to accommodate the critical air balance that is needed to operate each of the robotic paint booths. If changes are needed to operate the paint booths, the permittee shall measure and document the pressure differential readings in each of the vestibules and the corresponding exhaust duct flow rate. If the dampers are adjusted, the permittee shall record the pressure differential in each of the vestibules and corresponding velocity in the vestibule exhaust duct. These records shall be provided to the Division upon request.

The permittee may use either of the two previously mentioned methods ( $\Delta P$  or facial velocity) for the purpose of PTE validation. The permittee shall identify and report all 3-hour block averages when the set point criteria are not met. If either of the two methods indicate that PTE criteria are not met, then an investigation shall be conducted to determine the cause of the failure to meet the PTE criteria. The results of the investigation and corrective actions taken shall be recorded. These records shall be submitted to the Division upon request.

If the average of any of the three monitoring points is below the set point for greater than a 15-minute period, the permittee shall use a prorated capture efficiency based on the set point value. The prorated capture efficiency shall be determined by the following equation:

$$\frac{\text{Recorded average value for 15 minute period (fpm)}}{\text{Setpoint value for the PTE}} \times 100\% = \text{Prorated capture efficiency}$$

If the prorated capture efficiency determined by the above equation is less than 75 %, then the permittee must assume zero (0) % capture efficiency.

**[Note: The use of this prorated capture efficiency is only valid for the purposes of demonstrating compliance with 401 KAR 51:017. For Subpart PPPP compliance purposes a value of zero must be assumed unless the permittee has actual capture efficiency test data at the reduced  $\Delta P$  or facial velocity value]**

## SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

### **Continuous Compliance Plan (Continued)**

#### **PTE Monitoring for Emission units 03 (Low Gloss) and 12 (Resist)**

The permittee shall monitor the pressure differential at a representative point in the enclosure near the resist paint booth via a continuously measuring pressure differential monitor. Continuous compliance with the 100 % requirement will be demonstrated when all 3-hour block average  $\Delta P$  values are at least  $-0.007$  inches of  $H_2O$  (specifically  $-0.007$  and greater negative  $\Delta P$ ).

For all periods that the pressure differential monitor for emission units **03** and **12** do not meet the set point for the 3-hour block average, the permittee shall assume a capture efficiency of zero (0) for each 15-minute average below the minimum value of  $-0.007$  inches of  $H_2O$ . Compliance with the 85 % overall daily limit will then be calculated based on the number of 15 minute averages above the set point versus below. The following equation shall be used for demonstrating compliance with the BACT limit:

$$\frac{\text{Number of periods of operation} - \text{Number of periods below the limit}}{\text{Number of periods of operation}} \times \text{weighted average RTO}$$

Destruction efficiency = Control Efficiency

### **RTO Compliance Demonstration**

The combustion chamber<sup>1</sup> temperature of the four regenerative thermal oxidizers will be continuously monitored. All 4 RTOs will have one single set point temperature for normal operation.

With regard to the RTOs, compliance will be demonstrated as long as there are no 3-hour block temperature averages that fall below the set point combustion chamber temperature when a line is operating. If one RTO falls below the set point combustion chamber temperature, that unit will be taken off line. The painting would continue as long there is enough capacity for those lines to operate with or without the paint mix room exhausts being directed to the RTOs. If there is insufficient capacity in the RTOs, painting will be automatically curtailed because of the interlocks to the painting system. When the RTOs are inoperable, painting does not take place and, therefore, compliance will be maintained with the permit conditions. The facility may operate on three or less RTOs as long as sufficient RTO capacity is available to maintain compliance.

### **Paint Mix Room Exhausts**

The 2 paint mix room exhausts will be directed to the RTOs during normal operations. A signal will be used to identify the times when the exhausts are venting to the atmosphere. The periods that the mix rooms are venting to atmosphere will be recorded. Venting to the atmosphere would only occur if one or more of the four RTOs malfunctioned.

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<sup>1</sup> Megtec RTOs are designed for a combustion chamber temperature of 1600°F and a retention time of 0.5 seconds.

## **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)**

### **Continuous Compliance Plan (Continued)**

#### **Paint Mix Room Exhausts (Continued)**

The emissions during any venting to the atmosphere will be tabulated in order to make the continuous compliance demonstration. The uncontrolled emission rates are established as part of the official compliance tests. To some degree the paint mix room emissions are a function of the amount of paint mixed, i.e., the production schedule.

#### **Recorders and Manual Logs**

The continuous velocity and pressure differential measurements will be recorded individually on a strip chart that will be co-located with the Modus sensing devices, i.e., the velocity monitors for the supply and exhaust ducts and the pressure differential monitor on the emission unit **03** (low gloss) PTE. The permittee will determine if production (painting) is occurring for the periods that the monitor might drop below the set point. RTO combustion chamber temperature data is already continuously collected on a strip chart. Logs collected manually will be kept at each of the monitors.

The logs, strip charts and RTO temperature charts will be archived to prove compliance with the applicable permit limitations. The strip charts and logs will be used as a back up to the electronic data acquisition system. A malfunction or failure of a strip chart recorder will not be reported to the Division if the data acquisition system was functioning during the same period. If the data acquisition system and strip charts fail for the same or a different reason, the permittee will file a malfunction report with the Division. Manual logs will be kept in the advent of a failure in both the strip charts and data acquisition system.

#### **Data Acquisition System**

The permittee has installed a data acquisition system and connected it to a central computer. This system will be used to provide a warning when a specific compliance limit is approached and to shut down a line if a specific compliance level is not achieved (i.e., be directly interlocked to the robotic spraying operations). Monthly and annual reports will be generated from the data archived in the computer. The computer will provide a real time demonstration of compliance and also provide a historical record. Such data will be available for review by an inspector or other regulatory agency personnel. The strip charts and the manual logs will be used as a back up in the event of a data acquisition system malfunction. The strip charts and logs will be used for compliance demonstration during periods of data acquisition system malfunction. No malfunction report will be filed if the strip charts record all required information during any data acquisition system failure.

## **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)**

### **Continuous Compliance Plan (Continued)**

#### **Emission Units 02, 03, 12, 14, 18 and 19**

#### **START-UP, SHUTDOWN AND MALFUNCTION**

The permittee will operate the corresponding air pollution control system at all times that one or more of the four paint lines is in operation. There are potentially some occasions when a line will be running and the air pollution control system will not be operating due to a start up, shutdown or malfunction. The permittee shall comply with 401 KAR 50:055. The permittee shall document those periods when each line/source is in a start-up, shutdown or malfunction mode. A discussion follows of the actions that the permittee will take.

#### **Line Start Up**

Start up will be based on the ready status of the robotic sprayers. When any sprayer on any line is placed in a ready position, the RTOs will be started (if they are not already operating). When the set point temperature of the RTOs that are needed to support the production is achieved, the robotic sprayers may begin operation. It is likely that the chain or line could be moving at times when the robotic sprayers are NOT in the ready status. This usually occurs for periods of maintenance such as over holidays or long weekends when production is idle. For compliance purposes, emissions will be tracked when the sprayers are ready, the RTOs are at the set point temperature (ready status) and the RTO interlocks have allowed spraying to begin. However, when the RTOs reach ready status, all air from the ovens, spray booths and the PTEs will be delivered to the RTOs. In short, when the robotic sprayers on a particular line are in ready status AND the RTOs are operating, all air will be sent to the RTOs.

#### **Line Shutdown**

For all planned line shutdowns, all air will be vented to the RTOs and the RTOs will operate until such time as the robotic sprayers are removed from a ready status and sufficient time has elapsed to allow several air changes to remove the VOCs from the spraying and drying operations. A signal will be provided to the PLC to change the status from ready to not ready, thus preventing the robotic sprayers from emitting VOCs during scheduled maintenance, reprogramming, etc. All VOC emissions from the process will be controlled when the robots are in a ready status.

**SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)****Continuous Compliance Plan (Continued)**  
**Emission Units 02, 03, 12, 14, 18 and 19****Malfunction of Air Pollution Control System**

In case of a malfunction, the control system will continue to operate as long as the robotic sprayers are in a ready status. If the 4-unit RTO destruction system<sup>2</sup> fails, the robotic sprayers would stop spraying (stop emitting VOCs). The exhaust fans would continue to operate by venting air to the RTO unit or to the atmosphere for a period of up to 4 hours. Continuous venting is required to prevent any solvent fume build up in the paint booths, the tunnels or the ovens. The 4-hour period will allow sufficient time for the wet parts to pass completely through the ovens. Repairs will be made as soon as possible and the RTOs will be brought back to ready status. If VOCs are still present in the system the remaining VOCs and exhaust will be directed through the RTOs. A malfunction report will be filed with the Division if a malfunction occurs and causes the bypassing of VOCs to the atmospheres.

If any of the three PTEs do not meet the set point values for any 15-minute period (200-fpm facial velocity or negative 0.007 inches of H<sub>2</sub>O pressure differential), a warning signal will be provided to the operators indicating that there is a potential malfunction related to the enclosure (e.g., fan failure, door blocked open, make-up air/recirculation loop malfunction, etc.). Based on the nature of the warning and malfunction, the line will be shut down as needed to maintain compliance.

When the line is started after a scheduled shutdown or a malfunction has been corrected, the demonstration of compliance for the PTEs will commence with the next 3-hour block average that is collected. Deviations from the set points will be recorded during periods of operation. If a deviation results in the release of VOCs to the atmosphere due to a bypass situation of a mix room or paint line a malfunction report will be filed with the Division. If no release of excess emissions occurs, no malfunction report will be filed.

If the deviation causes the facility to not meet the daily BACT requirement and the deviation was a result of a malfunction, a malfunction report will be filed with the Division.

If there is insufficient capacity in the 4-unit RTO system due to a malfunction of one or more units, the interlocks will first vent the paint mix room exhausts and then the paint lines to atmosphere until the available capacity is adequate. Painting will be curtailed by the interlocks on any bypassed paint lines. The bypassing of the mix rooms will be reported to Division.

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<sup>2</sup> The VOC control system, which has a common manifold, is designed/sized to operate with 3 of the 4 RTOs being capable of handling all 4 paint lines. If one RTO fails, then the painting could continue because there is sufficient capacity in three units to handle the flow rate from all four lines. However, depending on which unit fails, there may not be enough remaining capacity to handle the paint mix room exhausts, especially if all lines are operating and one of the large RTOs fails.



## **SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)**

### **Continuous Compliance Plan (Continued)**

#### **Emission Units 02, 03, 12, 14, 18 and 19**

##### **Paint Mix Room Discharge to Atmosphere**

Should one of the RTOs fail or malfunction resulting in insufficient capacity to treat all sources, the permittee would discharge the paint mix room exhausts directly to the atmosphere. An interlock system will be set to the T-dampers from the paint mix rooms to accomplish this. The time periods of an RTO malfunction will be recorded and the computations for demonstrating compliance will reflect that no controls operated during these periods. The uncontrolled emission rates obtained from the most recent compliance test for the paint mix rooms (adjusted for production, if necessary) will be used in calculating emissions to the atmosphere and overall control efficiency for the facility (control efficiency compliance equation described earlier).

## SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
2. Pursuant to 40 63.4492, the permittee shall meet the following operating limits for those coating operation(s) on which the permittee uses the emission rate with add-on controls option:

**Thermal Oxidizers:**

The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to § 63.4567 (a).

**Compliance Demonstration Method:**

- i. Collect the combustion temperature data according to § 63.4568 (c);
- ii. Reduce the data to 3-hour block averages; and
- iii. Maintain the 3-hour average combustion temperature at or above the temperature limit.

**Emission capture system that is a PTE according to § 63.4565 (a):**

- a. The direction of the air flow at all times must be into the enclosure; and either
- b. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or
- c. The pressure drop across the enclosure must be at least 0.007 inch H<sub>2</sub>O, as established in Method 204 of appendix M to 40 CFR part 51.

**Compliance Demonstration Method:**

- i. Collect the direction of air flow, and either the facial velocity of air through all natural draft openings according to § 63.4568 (g) (1) or the pressure drop across the enclosure according to § 63.4568 (g) (2); and
- ii. Maintain the facial velocity of air flow through all natural draft openings or the pressure drop at or above the facial velocity limit or pressure drop limit, and maintain the direction of air flow into the enclosure at all times.

## SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b (IV)1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place as defined in this permit, and time of sampling or measurements;
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b(IV) 2 and 1a(8) of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
  - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
  - b. To access and copy any records required by the permit;
  - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Section 1b (V) 1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

## **SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
  - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall submit written notice upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7. above) to the Regional Office listed on the front of this permit within *30 days*. Other deviations from permit requirements shall *be included in the semiannual report required by Section F.6* [Section 1b (V) 3, 4. of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
  - a. Identification of the term or condition;
  - b. Compliance status of each term or condition of the permit;
  - c. Whether compliance was continuous or intermittent;
  - d. The method used for determining the compliance status for the source, currently and over the reporting period.
  - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

## **SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications should be mailed to the following addresses:

Division for Air Quality  
Ashland Regional Office  
1550 Wolohan Drive, Suite 1  
Ashland, KY 41102-8942

U.S. EPA Region IV  
Air Enforcement Branch  
Atlanta Federal Center  
61 Forsyth St.  
Atlanta, GA 30303-8960

Division for Air Quality  
Central Files  
200 Fair Oaks Lane, 1<sup>st</sup> Floor  
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.
11. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

## SECTION G - GENERAL PROVISIONS

### 1. General Compliance Requirements

- a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
  - (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
  - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
  - (4) New requirements become applicable to a source subject to the Acid Rain Program.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020 Section 3(1)(c)].

## SECTION G - GENERAL PROVISIONS (CONTINUED)

- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-15-b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3) 2.].
- l. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3) 4.].
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3) 1.].

## SECTION G - GENERAL PROVISIONS (CONTINUED)

- p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
- q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
  - (1) Applicable requirements that are included and specifically identified in the permit and
  - (2) Non-applicable requirements expressly identified in this permit.

### 2. Permit Expiration and Reapplication Requirements

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

### 3. Permit Revisions

- a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

### 4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

No construction authorized by this permit.



## SECTION G - GENERAL PROVISIONS (CONTINUED)

### 5. Testing Requirements

- a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.
- b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

### 6. Acid Rain Program Requirements

- a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NOx compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

### 7. Emergency Provisions

- a. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
  - (1) An emergency occurred and the permittee can identify the cause of the emergency;

## SECTION G - GENERAL PROVISIONS (CONTINUED)

- (2) The permitted facility was at the time being properly operated;
    - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
    - (4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
    - (5) This requirement does not relieve the source of other local, state or federal notification requirements.
  - b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
  - c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].
8. Ozone Depleting Substances
- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
    - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
    - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
    - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
    - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
    - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
    - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
  - b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

## **SECTION G - GENERAL PROVISIONS (CONTINUED)**

### **9. Risk Management Provisions**

- a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center  
P.O. Box 1515  
Lanham-Seabrook, MD 20703-1515.

- b. If requested, submit additional relevant information to the Division or the U.S. EPA.

**SECTION H - ALTERNATE OPERATING SCENARIOS**

N/A

**SECTION I - COMPLIANCE SCHEDULE**

N/A